Baldridge Criteria For Performance Excellence: Impact On State Assessments In Michigan's Elementary Schools

Linda Hicks

Seton Hall University

Follow this and additional works at: https://scholarship.shu.edu/dissertations

Part of the Educational Assessment, Evaluation, and Research Commons, and the Elementary Education and Teaching Commons

Recommended Citation
https://scholarship.shu.edu/dissertations/307
BALDRIGE CRITERIA FOR PERFORMANCE EXCELLENCE: IMPACT ON STATE ASSESSMENTS IN MICHIGAN'S ELEMENTARY SCHOOLS

BY

LINBA HICKS

Dissertation Committee:

Joseph Szurar, Ph.D., Mentor
John Graves, Ph.D.
Daniel Gutmore, Ph.D.
William Weber, Ph.D.

Submitted in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education
Seton Hall University

2005
ACKNOWLEDGEMENTS

I will always acknowledge my belief that there is nothing that I can do without God.

Hast thou not known?
hast thou not heard that the everlastig God, the Lord, the Creator of the ends of the earth, faisteth not, neither is weary?
there is no searching of his understanding.
He giveth power to the faint and to them that have no might he increaseth strength.
Even the youths shall faint and be weary, and the young men shall utterly fall:
But they that wait upon the Lord, shall renew their strength:
They shall mount up with wings as eagles:
They shall run and not be weary:
And they shall walk, and not faint.
Isaiah 40: 28-31

I thank my committee that has always remained professional, insightful and supportive. I very much appreciate my mentor, Dr. Stetar. His expertise and advice have proved to be invaluable. I am also grateful to Dr. Gutmore for his assistance and advice. I sincerely appreciate Dr. John Graves for his support and encouragement. I also appreciate Dr. Weber. Dr. Weber has encouraged me from the beginning to pursue this goal. His support and encouragement has been unending.

There are so many others to thank including so many friends. I appreciate the encouragement and support from Deacons: Naomi Hughey, Wayne Watkins, and Verrie Bryant. I also thank Dr. Dawkins, who has been a very positive and encouraging friend. During this experience I also met two wonderful people in Cohort VII, Donna Hargens and George Milot. This experience would not have been the same without them. I have enjoyed and appreciated getting to know them.

Finally, I thank the Hicks Family for all of their encouragement. I especially thank my brother Marcus Hicks who probably has no idea how much his technology skills and continual support have meant to me. Lastly, my sister Sylvia Hicks-Fox has really been there.
for me. However, this is no different than she has been all of my life. She has been a tremendous support system and has really poured out her love to me during this time.

I am eternally grateful for all mentioned and unmentioned persons that have helped me through this journey!
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS................................................................. ii
LIST OF TABLES................................................................. vii

CHAPTER I: INTRODUCTION
   Background................................................................. 1
   Problem Statement...................................................... 5
   Purpose................................................................. 6
   Research Questions.................................................... 7
   Significance of the Study.............................................. 7
   Limitations.............................................................. 8
   Definition of Terms................................................... 8

CHAPTER II: REVIEW OF RESEARCH AND LITERATURE
   The Historic Perspectives of Business and Education.......... 12
   Edward Deming and Total Quality Management (TQM).......... 13
   The Baldrige Award................................................... 15
   The Baldrige Criteria................................................ 17
   Baldrige Educational Studies....................................... 23
   Summary................................................................. 27

CHAPTER III: METHODOLOGY
   Population and Sample................................................ 31
   Instruments............................................................ 36
   Procedures............................................................. 37
   Reliability and Validity.............................................. 38
   Data Analysis.......................................................... 38
   Summary................................................................. 39

CHAPTER IV: RESEARCH FINDINGS
   Introduction.............................................................. 41
   Case Study School A.................................................. 41
      Background Information.......................................... 41
      Summary of Interview.............................................. 42
   Case Study School A.2............................................... 45
      Background Information.......................................... 45
      Summary of Interview.............................................. 46
   Comparison of Schools A.1 and A.2 Interviews.................. 49
      Interviews: Brief Overview of School Responses A.1 and A.2 49
   Case Study School B.................................................. 54
      Background Information.......................................... 54
      Summary of Interview.............................................. 54
   Case Study School B.2............................................... 57
CHAPTER V: SUMMARY, CONCLUSIONS, SUGGESTIONS FOR FUTURE RESEARCH

Summary ........................................................................... 121
Conclusions ..................................................................... 123
Findings as it Relates to the Literature ............................... 124
Baldrige Schools ............................................................ 124
Non-Baldrige Schools ..................................................... 127
What Was Learned From This Study .......................................................... 128
Interviews ................................................................................................. 128
Systems Check Level III ........................................................................... 129
MEAP ......................................................................................................... 129
Suggestions for Future Research ............................................................... 132

Reference .................................................................................................. 134
LIST OF TABLES

Table 1: Case Study Data-Schools A.............................................33
Table 2: Case Study Data-Schools B.............................................34
Table 3: Case Study Data-Schools C.............................................35
Table 4: School Systems Check Level III-School A.1..........................83
Table 5: School Systems Check Level III-School A.2..........................85
Table 6: School Systems Check Level III-Comparisons of A.1 and A.2.......88
Table 7: School Systems Check Level III-School B.1..........................90
Table 8: School Systems Check Level III-School B.2..........................93
Table 9: School Systems Check Level III-Comparisons of B.1 and B.2.........96
Table 10: School Systems Check Level III-School C.1.........................98
Table 11: School Systems Check Level III-School C.2.........................100
Table 12: School Systems Check Level III-Comparisons of C.1 and C.2.......103
Table 13: School Systems Check Level III-Comparison of Baldrige and Non-Baldrige.........................................................109
Table 14: School System Check Level III-Comparison of Baldrige and Non-Baldrige Total.................................................................112
Table 15: MEAP-Math Scores Baldrige and Non-Baldrige Schools.............113
Table 16: Independent Sample t test for Math.....................................114
Table 17: MEAP-Reading Scores Baldrige and Non-Baldrige Schools..........115
Table 18: Independent Sample t test for Reading.................................116
Table 19: MEAP-Science Scores Baldrige and Non-Baldrige School............117
Table 20: Independent Sample t test for Science..................................118
Table 21: MEAP-Social Studies Scores Baldrige and Non-Baldrige Schools ....119

viii
Table 22: Independent Sample t test for Social Studies.................................120
CHAPTER 1-INTRODUCTION

Background

The demands for American schools today which have been augmented by societal pressures, technological advances, and constant changes in the citizenry within the United States, has increased the need to deliver education to a diverse population of students using much different methodologies than in the past.

The challenge is for school districts to find a process that will be effective in the pursuit of improved academic achievement. Marchese (1994) described the Baldrige Criteria for Performance Excellence as a “high visibility, high prestige process of self study and visitation” (p. 4). Marchese indicated that those that are engaged into processes of values and rewards would find Baldrige as a means to improvement. Marchese stated, “The power of the Baldrige comes when organizations themselves embrace quality values; then they want the Baldrige as a template to see how they’re doing and what to work on next” (p. 4).

Dale (2004) conducted a study of seven schools on probation. The purpose of the study was to explore the perceptions of administrators, faculty, and staff regarding how they perceived the Baldrige Criteria as being important and to describe their perceptions concerning the importance of the Baldrige Criteria. In addition the study identified those elements of the Baldrige Criteria that were perceived as being in existence before the Baldrige Criteria was implemented. Dale stated, “This lends credence to the use of the Baldrige Criteria as a foundational assessment tool for continuous improvement in the
schools on probation especially in the area of student, stakeholder, and market focus” (p. 102).

According to Walpole and Noeth (2002) the “Malcolm Baldrige Education Criteria for Performance Excellence may hold promise for fundamentally improving K-12 education” (p.1). Walpole and Noeth acknowledge that the Baldrige Criteria is not without controversy and stated that the criteria addresses many issues that other educational efforts have been unable to, such as “leadership, systems thinking, changes in school culture, and data-driven decision making” (p. 1).

Siegel (2000) stated when used consistently, the Baldrige Criteria answers questions of knowing what works and how to maximize the potential of improvements. According to Siegel there has been a growing interest in the Baldrige Criteria when educators consider the results from schools in North Carolina, Texas, and Florida. Siegel suggested that it is difficult for educators not to pay attention to such positive results. Siegel stated, “Perhaps most promising, the long-term use of Baldrige can build the organizational capacity of the education system, with business and community support, to sustain student and system improvement over time” (p. 2).

The Baldrige Criteria, developed by the National Institute of Standards and Technology (NIST) in the late 1980’s, initially focused on continual improvement of business and industry. The original Baldrige model was developed in government and corporate settings. The emphasis of the criteria was focused on the United States economic competitiveness in a global market. In 1998, the Congress established resources that expanded the criteria to include health and education. The education criteria published for the award process in 1999, funded by the Department of Education, would serve as a basis
for delivering awards and as a distinguishing tool for a school's overall performance management system. The criterion has the same basic framework as does businesses, though the language has been changed to fit into educational settings. In 1999, Baldrige in Education invited leaders from fifty states to participate in a two-year collaboration to initiate this process.

The Baldrige in Education Initiative (BIE IN) website indicated that Baldrige in Education is a partnership of twenty-six key national education and business organizations. These organizations have merged to assist states, school districts and communities to "build capacity" for continuous improvement for student achievement and organizational system performance. In November of 1999, six states, Illinois, Indiana, Maryland, New Mexico, Ohio and Texas, implemented the Baldrige in Education initiative (BIE IN). According to Walpole and Noeth (2002) who developed the American College Testing (ACT) study, a review of known facts regarding the applications of the Baldrige Criteria to K-12 education, was developed. The study suggests that in order to transform education, decision-making structures must be developed. The Baldrige in Education model emphasizes the use of data in making decisions and leads itself to improving the performance of students in individual schools and meets the requirements of No Child Left Behind.

BIE IN (n.d.) stated, "Baldrige provides educators and their business and community partners with a framework to transform the education system" (p. 4). The following are accounts from BIE IN that indicated results from schools that have utilized the Baldrige Criteria as a "quality-based reform effort":

In North Carolina, student achievement gains on SAT tests and the National Assessment of Educational Progress are rising faster than anywhere else in the
country. From 1997 to 1999, reading and math proficiency increased in all 30 school districts that have used a Baldrige-based improvements strategy for three years or more. Writing proficiency increased in 29 of the 30 school systems (one system, which has been implementing for 2 years, achieved the same scores in 1997 and 1999).

In the Brazosport Independent School District of Texas, reading, writing and math scores have risen dramatically in all schools, for all students—including African-American, Hispanic, and economically disadvantage students. Moreover, achievement gaps among affluent and at-risk students have narrowed markedly. Brazosport received the Texas State Quality Award in 1998 and received a site visit from the Baldrige Award examiners in 1999.

At Azalea Elementary School in Pinellas County, Florida, school-wide test scores jumped 20 percent in two years on a national test of basic skills. The principal and teacher are using performance data to intensify instruction so students who are at risk of being held back in the early grades can catch up and meet grade level expectations within a single school year. (p. 4)

Shipley and Associates (2003) presented the Baldrige Criteria based on seven Categories and eleven Core Values. The Categories are: leadership; strategic planning; student and stakeholder focus; information and analysis; faculty and staff focus; process management; and performance results. The Core Values are: Learning-Centered Education; Visionary Leadership; Organizational and Personal Learning; Valuing Faculty, Staff and Partners; Managing for Innovation; Systems Perspective; Management by Fact; Focus on the Future; Public Responsibility and Citizenship; Agility; and Focus on Results and Creating
Value. The Baldrige Criteria measures the content of various system components and connections, assesses the systems components and makes determinations about how well the components are working together to achieve the organization's goals. The systematic process of studying procedures assists in making decisions about which components and connections are assets and which are not. Baldrige is noted as an outline for directing the development of a system capable of high performance. Ultimately, the Baldrige Criteria has a systems perspective that imbeds certain processes into the everyday operations of schools and classrooms and enables the schools and classrooms to focus on student achievement and other identified goals.

Problem Statement

The study conducted by Walpole and Noeth (2002) concluded that research on the effectiveness of the Baldrige Criteria model indicated that the findings were limited. Walpole and Noeth stated, "Many published TQM (Total Quality Management) and Baldrige articles, which often describe a single school or district implementation and some of the results these implementations have achieved, include surprisingly little detail" (p. vii). Noeth further stated the empirical study, "that details how, why, or in which contexts an implementation can succeed" (p. ix), of the Baldrige Criteria is needed to substantiate the anecdotal reports that are associated with the reported changes in performance.

The current status of our education system within the United States has indicated the need for educational reform. Many efforts have been made to increase the educational standards and application to student achievement. The educational system has struggled to find solutions to the many challenges in the education setting. The recent demands of the federal mandate, No Child Left Behind, have left many schools in a quandary as to what
process is needed to chart their course of action for improvement. This study will analyze the perceptions of principals, in Baldrige and Non-Baldrige Schools, on school characteristics and leadership practices. In addition, student achievement will be examined to determine if there are differences between the Baldrige and Non-Baldrige Schools.

Purpose

The purpose of this study is to examine the perceptions of principals in Baldrige and Non-Baldrige Schools and to determine if student achievement is distinguishable when comparing MEAP scores in Baldrige and Non-Baldrige Schools.

Many corporations, according to Siegel (2000) for example, Xerox and Motorola used the Baldrige Criteria and developed successful companies. Business leaders in need of competent workers, workers that are prepared for the workforce, have joined educational leaders to promote the premise of the Baldrige Criteria and to support sustaining the educational system. Siegel, indicates the Baldrige Criteria to be an effective model to increase student achievement. However, contradictory research has been conducted in the dissertations by Bannister (2001) and Fusco (1994) that has attempted to translate TQM into more usable evaluation criteria, which both suggest that quality in schools cannot be substantiated through the use of corporate practices. Edds (2000) suggests that several key issues must be reconciled in order to utilize the Baldrige Criteria as a valid strategy for improvement.

One response to Edds (2000) recommendation in addressing key issues is found through the collaboration between North Central Association Commission on Accreditation and School Improvement (NCA CASI) and Jim Shipley and Associates. They have developed a model for District Accreditation based on the Baldrige Criteria. NCA CASI
(2003) stated, “The North Central Association Commission on Accreditation and School Improvement (NCA CASI) standard is designed as a Systems Approach for assessing and improving schools. The approach is both systematic and systemic, while providing a framework for continually improving organizational performance” (p. 2). Three school districts in the state of Michigan will pilot this model in the fall of 2004.

This research will inform the field as to whether the student achievement rate in Baldrige Schools is distinguishable when compared to Non-Baldrige Schools and to determine if the rate of achievement is proportional across different settings. This is particularly important given the national requirements to be able to demonstrate continuous improvement on an annual basis, as prescribed by NCLB.

Research Questions

1. What are the perceptions of the principals of Baldrige Schools, regarding school characteristics and leadership and the degree to which these practices affect student achievement?

2. What are the perceptions of the principals of Non-Baldrige Schools, regarding school characteristics and leadership and the degree to which these practices affect student achievement?

3. How does student achievement on MEAP differ between the Baldrige and Non-Baldrige Schools?

Significance of the Study

Schools must be able to demonstrate improvement in the academic achievement of students on a continual basis pursuant of the requirements of NCLB. School leaders who are
seeking ways to improve academic achievement may be able to use data from this study to initiate change in their respective schools or school districts.

As indicated in a report by ACT, the Baldrige Criteria model may “hold promise to fundamentally improving K-12 education in the United States” (Walpole & Noeth, 2002). The Baldrige Criteria for Performance Excellence is based upon a systems approach. The direct implications of the criteria are for all students to make continuous progress.

Limitations

Baldrige Schools were limited to those schools identified in the publication of Michigan Quality Council Awards Listing (2002 and 2003), and internet searches relating to schools utilizing the Baldrige Criteria. Representatives from nine Baldrige School districts were contacted. This study will be limited to three Baldrige Schools, based upon availability of those contacted.

Definitions of Terms

NCLB-No Child Left Behind is a federal mandate to promote higher educational achievement for all students.

MEAP-Michigan Educational Assessment Program. The tests are given to 4th and 5th grade students annually in the state of Michigan. 4th grade students take the English/Language Arts and Mathematics tests. 5th grade students take Science and Social Studies tests.

Baldrige Criteria-The Baldrige Criteria refers to the Baldrige Categories and the Baldrige Core Values, which are components of the Malcolm Baldrige Education Criteria for Performance Excellence.

Baldrige School-The Baldrige School is one that has implemented the Baldrige Categories and Baldrige Core Values into their system for a period of at least 3 years.
Non-Baldrige School: The Non-Baldrige School has not implemented the Baldrige Criteria into their school system.

School Characteristics-Defined by School Improvement Systems Level Check III in the categories of Leadership; Strategic Planning; Student, Stakeholder and Market Focus; Measurement, Analysis, and Knowledge Management; Faculty and Staff Focus; Process Management; and Performance Results.

Leadership Practices-Refers to practices of the person with the main responsibility for managing the school.

Classroom Practices- Defined by Classroom Systems Level Check III in the categories of Leadership; Strategic Planning; Student, Stakeholder and Market Focus; Measurement, Analysis, and Knowledge Management; Faculty and Staff Focus; Process Management; and Performance Results.

Seven Categories of Baldrige Criteria as defined by Jim Shipley and Associates (2003):

1. Leadership-Requires leaders to set and communicate direction consistent with stakeholder requirements.

2. Strategic Planning-Translates stakeholder needs into goals, measures and action plans.

3. Student and Stakeholder Focus-Defines the aim of the district, school, or classroom.

4. Information & Analysis-Addresses the "brain center" of the district, school, or classroom. It provides the foundation for aligned decision-making in all areas of the system.

5. Faculty and Staff Focus-Examines how the district, school, or classroom enables workers to develop and utilize their full potential.

6. Educational and Support Process and Management-Addresses how educational products and services are designed, implemented and improved.
7. **Performance Results:** Examines the district, school, or classroom performance in key areas (p. 65-72).

The eleven Core Values of Baldrige Criteria as defined by Jim Shipley and Associates (2003):

1. **Learning-Centered Education:** A focus on all activities on the learning needs of students. The emphasis is on active student learning with students taking responsibility for the management of key learning processes.

2. **Visionary Leadership:** Setting and communication of clear and visible directions, and high expectations. Visible commitment to continual improvement. Modeling of continual improvement principles and practices.

3. **Organizational and Personal Learning:** A well-executed approach to continual improvement that engages faculty, staff, and students as full participants in learning and as contributors to improvement processes.

4. **Valuing Faculty, Staff and Partners:** The practice of building internal and external partnerships to better accomplish overall goals. Investment in the on-going development of knowledge, capabilities, skills, and motivation of faculty, staff, and students.

5. **Managing for Innovation:** A focus on making meaningful change to improve the school’s services and processes and create new value for stakeholders.

6. **Systems Perspective:** The Core Values and the Seven Categories form the building blocks of an integrated system requiring both synthesis and alignment. A systems perspective means managing your whole organization, as well as its components, to achieve performance excellence.
7. Management by Fact-Decision-making based on measurement, information, data and analysis.

8. Focus on the Future-A future orientation and a willingness to make long term commitment to students and to all stakeholders-communities, employers, faculty, and staff.

9. Public Responsibility and Citizenship-The practice of the school serving as a role model in its operation as a member of the community.

10. Agility-Faster and more flexible response to the needs of customers, students and stakeholders.

11. Focus on Results and Creating Value-A focus on the school's performance on results which reflect and balance the needs and interest of students and all stakeholders (p. 49-59).
CHAPTER II

REVIEW OF RESEARCH AND LITERATURE:

The current performance of public education nationally indicates significant gaps in achievement. The question for many educators is how to build a high performing system of learning for all students. Consideration has been given to many educational initiatives. One that has been frequently considered has been the Baldrige Criteria, defined as a process which guides the growth of the corporate, educational or health organization to become capable of high performance. The model emphasizes using collected data of the organization to make decisions, which is comparable to the implementation of the No Child Left Behind legislation. The No Child Left Behind reform requires schools and school districts to develop a process of continuous improvement for all students by the collection of data to support improvements.

The Historic Perspectives of Business and Education

The history of U. S. schools sets the foundational understandings of the history of schools and its interrelationships with business and the growth of the country. In the beginning of educational history, when the Puritans first came to America in the 1600's, young people were religiously educated and were taught to become good citizens. According to Bunt and Provenzo (as cited in Arif & Smiley, 2003) in earlier times there were not many requirements for farming and small business, therefore, the focus of schools was to "train workers to become more refined "production" people". In these earlier times as society changed, the demands from the corporate institutions changed and so did the structure
of the educational system. Continual reform efforts, in response to the continual issues in education, have been initiated throughout history in an attempt to rebound from the situations at that particular time. One example is Sputnik, the Soviet spacecraft that landed on the moon prior to the Americans accomplishing such a feat. A national alarm was sent out that the United States curriculum appeared to lag behind, when compared to other countries. According to Button and Provenzo, being built upon that history are the federal governments interventions with the business sector, including Edwards Deming’s philosophy and Total Quality Management (TQM), which led to the development of the Baldrige Awards for corporations. Over time the educational sectors also began to focus their attention to the TQM model and the genesis of the Baldrige Awards in education evolved.

Edwards Deming and Total Quality Management (TQM)

According to Weaver (1992), who writes about TQM, after World War II, the Japanese, being devastated by the effects of the war, were looking for ways to restructure their economy. Edwards Deming, an American statistician with a new management theory, took his ideas to Japan. The Japanese utilized his ideas and now produce products that are in demand worldwide.

This success story has made Deming’s management theory, commonly known as Total Quality Management (TQM), an ideology which currently many American corporations are involved. According to Weaver (1992), the premise for the TQM philosophy is that customers are important, and the primary aim is to keep customers satisfied. In addition, the theory also believes that management needs to listen to nontraditional sources, other than top-down authority, for information. TQM advocates that
managers need to make changes in order to improve the organization. Deming’s 14 Points illustrate the changes that managers need to employ.

Weaver further stated that TQM has undergone many changes to become adaptable to education. It promotes the role of students, role of teachers and testing and evaluation as significant proponents to educational change. TQM is a gradual transformation that requires improvement over time and requires long-term vision and commitment to systematic change. TQM has received support in education from business and government. Although TQM does not answer all of the ills for the educational system, it does, however, produce some relevancy to the educational management system by providing a systematic approach to building a high performing organization.

Arif and Smiley (2003) suggest that several issues in education inspired the implementation of the process into educational settings. The issues include: declining enrollment, declining quality, facilitating change, increasing tuition, demand for better quality graduates by employers, changing demographics, advanced technology, intensified competition among institutions, declining retention rates, student dissatisfaction with overall service quality. Some of the issues surrounding the implementation of the TQM practices are: lukewarm response from the liberal arts community, change of focus and goals of higher education, individual preferences, and the definition of customer, producer, and market.

Pisco (as cited in Arif & Smiley, 2003) discussed the challenges associated with the implementation of the TQM process that have caused researchers to conclude that TQM principles used in industry are not directly adaptable to education.

However, the study of Bonstingl (1996) stated, "Quality transformation takes time. In most cases it takes two to three years of constant commitment and hard work to redesign
suboptimizing systems and processes, and another two years to see tangible, long-lasting benefits" (p. 55).

The Baldrige Award

On August 8, 1987, the Malcolm Baldrige National Quality Improvement Act passed the U.S. Congress. The Baldrige model was developed for businesses. The Baldrige Awards were named after the former Secretary of Commerce, Malcolm Baldrige. The purpose of the act was for establishing and conducting a national quality improvement program. Awards would be given to companies and other organizations that have a practice of effective quality management and have made significant improvements in the quality of goods and services. In addition, information about those successful strategies and programs should be published for sharing with others.

Collier, Goldstein, and Wilson (2002) study of the business aspects of Baldrige, suggests findings of the Malcolm Baldrige National Quality Award (MBNQAQ) in the business sector have evolved over the years and hypothesize the different cause and effect relationships for the way business results are achieved. Research uses criteria data analysis method, called structural equation modeling that consists of two components, the measurement model, and the structural or causal model. A report from NIST found that Baldrige winners outperformed the S&P 500 in 2002 by 3 to 1. Baldrige winners achieved a 323% return on investment, as compared to 110% return for the S&P 500.

It is difficult to know the actual number of companies that are represented as using the Baldrige criteria. The assumptions of the study conducted by Collier, Goldstein, and Wilson (2002), are based on the number of requests for copies of the Baldrige Criteria. According to Daniels (2002) who studied the cost effectiveness of Baldrige, the Baldrige
National Quality Program in the business sector was estimated in a recent study to have a 207
to 1 benefit to cost ratio. The study conducted by Albert Link, University of North Carolina
and John Scott, Dartmouth College, surveyed members of ASQ, extrapolated data, and
assumed that other companies benefited in the same way that the ASQ companies do. The
study by Link and Scott indicated that the Baldrige criteria have a systems perspective that
focuses on results rather that process. The social cost of the Baldrige program is estimated at
$119 million. The ASQ organization members report $2.17 billion, social value of net
benefits. If the entire economy benefits to the same extent as the ASQ members did, then the
Baldrige program produces $24.65 billion in social benefits.

The Malcolm Baldrige National Quality Award is sometimes called, "the most
important catalyst for transforming American business" and at other times is called, "as
destructive to business as deregulation was to the savings and loan industry" (Seymour,
1994, p. 16). However, Seymour stated the Malcolm Baldrige Award may be a catalyst for
transformation in education. He also said on the other side it could be a sign of a round for
"external control initiatives" (p. 16).

In 1992, consideration was given that the federal government creates a Baldrige-like
award for education. It is believed the addition of the education category would allow self-
examination and would integrate and focus on improved outcomes. Baldrige is thought to
stimulate the development of continuous improvement in education, produce a culture of
sharing, provide a framework that allows innovative ideas, and possibly provide the same
catalyst as it has for industry.

The Baldrige Awards was developed as a standard of a high performing organization.
Beginning in 1999, educational institutions could apply for the award. Arif and Smiley
(2003) criticism of this model include that the quality principles can be implemented in an assembly line environment but cannot be fully applied in an educational setting. Students come to school with different ability levels and require different methods of processing their needs. In order to meet these needs in the Baldrige model, instructors would need to change their styles continually. The same concerns arise when education is expected to collect data and measure performance in an environment where time is very limited and the ability to collect data is not always readily available. The advantages have been determined as having criteria that can be used to do feasibility studies. The results can be utilized to make determinations regarding future curricular uses, based upon the select market needs. Results can also be used motivationally to address the needs and concerns of staffs. However, the Baldrige criteria is noted to take away the flexibility of teachers in that collecting data, developing lessons from that data, and teaching the data, can lead to the loss of teacher facilitation and agility.

According to Arif and Smiley (2003) the quality of non-instructional strategies may improve by the use of Baldrige strategies. However, the interactions that teachers have with students necessitate at times immediate reactions. Compiling data and statistical analysis are not believed to be the response to that need. Proposed through the study of Arif and Smiley is that the “rigid framework imposed by the Baldrige Awards” may be disadvantageous to the teaching environment that lends itself to proficiency, immediate response and human intellectual exchanges.

The Baldrige Criteria

According to the Baldrige National Quality Program (2004) the Baldrige Criteria are the basis for organizational self-assessments. The three important roles are:
1. to help improve organization performance practices, capabilities and results.

2. to facilitate communications and sharing of best practices information among U.S. organizations of all types

3. to serve as a working tool for understanding and managing performance and for guiding organizational planning and opportunities for learning (p. 1).

Baldrige allows school districts to align initiatives into a systemic reform effort. It helps to focus efforts on educational priorities such as fact-based decision making, identifies opportunities for growth in the classroom, and helps to assist school districts to implement improvements. Conyers (2000) stated Baldrige is a system that can be used in schools and classrooms to bring about “systematic, continuous improvement”. “We are convinced that total quality can become a self-perpetuating methodology that can be used effectively in schools and classrooms to bring about systematic, continuous improvements” (p. 22). In its long term use, Baldrige can build the organizational capacity of the educational system. Business and community support help to sustain the educational system over a period of time.

Tobergate and Curtis (2002) discussed the importance of school improvement and training. Tobergate and Curtis stated:

“School improvement does not begin with one-shop teacher in-service activities, new and revised curricula, raised standards or state mandated proficiency tests. These ideas have minimal effect if the school culture does not embrace, engage in and support meaningful change. School improvement begins with development-development of people and the school culture to keep the organization vibrant and prepared to meet new needs and challenges. It involves
recognizing the need for change, understanding the change and building support structures that lead to focused change and building support structures that lead to focused change and school improvement” (p. 22).

Barth et al. (2000) stated, “Quality principles and the Baldrige Criteria provide a proven set of processes and tools for creating systemic focus and alignment and for managing the process of change” (p. 3). Barth et al. also emphasized the importance of training in the Baldrige process. “Because quality and the Baldrige Criteria are systemic reforms, training needs to permeate the system. Teachers and administrators need access to timely and effective training to help them adopt new practices and learn to use new tools” (p. 9-12).

Barth et al. (2000) also emphasized the use of data in the Baldrige process. Barth et al. stated, “Data-based decision-making is a fundamental concept of the Baldrige process. Data allow the analysis of performance against goals and standards and the identification of areas in need of improvement” (p. 13).

Baldrige in Education Initiative (BiE In) was created to promote the interest among educators to use the Baldrige criteria to raise student achievement. Siegel (2001) stated:

“The best thing about using the Baldrige is its potential for transforming education where it counts-in the classroom. In defense of those who express that Baldrige implicates students as widgets, it is stated that students play an important role in quality-driven education. They are seen not as products but as active workers that produce learning. When students are assuming responsibility for their own learning becomes the norm rather than the exception, then we'll know we've arrived” (p. 3).
Karhanos and Karhanos (1996) in describing the Baldrige Education Pilot, stated that this criteria was developed in response to the interest from education and business leaders to have similar criteria as the business Baldrige Awards. The following lists the purposes of Baldrige as indicated in the Baldrige in Education Pilot in 1994:

1. To help improve school performance practices by making available integrated, results oriented set of key performance requirements.
2. To facilitate communication and sharing of best practices information within and among schools of all types based upon a common understanding of key performance requirements.
3. To foster the development of partnerships involving schools, businesses, human service agencies, and other organizations.
4. To serve as a working tool for improving school performance, planning training and institutional assessment (Karhanos & Karhanos 1996, p. 272).

Goals of the Pilot Criteria:

1. Delivery of ever-improving educational value to students, contributing to their overall development of well-being.
2. Improvement of overall school effectiveness, use of resources and capabilities (Karhanos & Karhanos 1996, p. 272).

Summary of the core values and concepts:

1. Learning-centered education
2. Setting high expectations and standards for all students
3. Understanding that students may learn in many ways and at different rates.
4. Providing major emphasis on active learning.
5. Regularly and extensively using formative assessment early in the learning process.
7. Assisting students to use self-assessment.
8. Focusing on key transitions such as school-to-school and school-to-work.
9. Leadership.
10. Continuous improvement and organizational learning.
11. Faculty and staff participation and development.
12. Partnership development. Both internal and external partnerships should be developed to help the school accomplish its goals.
13. Design quality and prevention
14. Management by fact. An effective modern management system must be based upon measurement, information, data and analysis. Measurement must derive from and support the school's mission and strategy. Therefore, strong focus should be placed on the design of the school's information system.
15. Long range view of the future.
16. Public responsibility and citizenship. By the nature, a school must serve as a role model of an organizational unit in a community.
17. Fast response. Many organizations are finding that an important component of continuous improvement is faster and more flexible response to their customers.
18. Results orientation. A school's performance system should focus on results, especially on those related to student performance and to the effectiveness and efficiency of the use of resources (Kastenholz & Kastenholz 1996, p.273).

The seven categories are built upon strategic core values and make clear the organizational categories that can be evaluated to achieve quality and continuous
improvement. The criteria strongly suggests the interrelationships of the cycles to plan, implement the plan, assess the plan, and make revisions to the plan according to the findings of the assessment. The core values stress learning-centered education, leadership, continuous improvement, assessment, and results orientation.

According to Siegel (2000) schools can learn from the approach that several successful companies have taken. Companies such as Motorola and Xerox have developed processes of systematic improvements and frameworks. Business leaders in Pinellas County, in Florida, in North Carolina, in Freeport, Texas and other places have utilized the Baldrige Criteria since the early 1990's to transform education. Siegel suggests evidence of positive results of these partnerships with the business leaders in those states.

In the study Siegel (2000) revealed results which she believes to have been validated through the evidence that North Carolina and Texas lead the United States in student performance gains during the 1990's. Forty-five North Carolina school districts, which represent 70% of students throughout the state, have joined a partnership which is focused on implementing a Baldrige improvement strategy. The Brazosport Independent School District in Freeport, Texas is the largest in the state to have all of the schools rated as exemplary. In 1997-98 more than 92% passed state reading, math and writing test, which indicated an 80% increase in some schools. The Pinellas County School District in Tampa Bay, Florida, is the 22nd largest U.S. school district. Azalea Elementary test scores increased 20% in two years.

Matthews (2002) explored the first two schools that received the Baldrige Award: The Chugach School District in south-central Alaska and the Pearl Rivers School District in New York. Pearl River results over a four year period were from 60% to 86% of high school
seniors receiving a New York Regents diploma. Students which scored a three or above on the Advanced Placement tests, increased from 53% to 67%. There was also an increase in student and parent satisfaction. Chugach reading scores on the California Achievement Test increased from the 28th percentile to the 71st percentile. Math scores went from the 54th to the 78th percentile. The students scored better than the state average.

Indicated from these two diverse populations is the commonality that these two school districts had goals which were clear to everyone. Teachers were better able to focus professional development efforts toward helping students reach academic goals. Professional development was noted to be a key factor in both school districts. Matthews (2002) stated, "Because the Baldrige process emphasizes collaboration, consensus, and respect for other viewpoints, all stakeholders—parents, teachers, and students—embraced the goals that were ultimately developed" (p. 28).

Baldrige Educational Studies

The Act Report, conducted by Walpole and Noeth (2002) stated that the Baldrige Criteria holds promise for improving K-12 education. The Baldrige Criteria has eleven core values: visionary leadership, learning-centered education, organizational and personal learning, valuing faculty, staff, and partners, agility, focus on the future, managing for innovation, management by fact, public responsibility and citizenship, focus on results, and creating value, and systems perspective. The seven categories that schools and school districts use for self assessment are: leadership, strategic planning, student, stakeholder, and market focus; information and analysis; faculty and staff focus; core process management; and organizational performance results.
Two studies in the Act Report consisted of examining leadership processes in districts focused on implementing Baldrige, and the examination of quality implementation and the connection to quality improvements. The second study focused on ten high schools over a four year period. Both studies resulted in more information needed to substantiate a clear analysis of the impact of Baldrige. Overall, the study conducted concluded that, "Very little empirical data exists that detail how, why, or in which contexts implementation can succeed. Although training is considered critical, few specifics regarding training are provided. Outcomes and results are often reported with insufficient detail about what specifically changed and how outcomes were achieved" (Welsh & Nuthe 2002, p. ix).

In a study of seven low-performing schools, Dale (2004) explored the perceptions of the administration, faculty, and staff concerning the importance of the Baldrige Criteria and their beliefs as to the elements of the Baldrige Criteria being in existence prior to the actual involvement in the Baldrige implementation. The conducted study utilized a survey of seventy questions on the seven Baldrige Categories which requested a response on the importance and existence of the categories. The survey was designed to help clarify and verify information that was obtained in on-site assessment interviews.

The results of the study indicated that all of the statements in the survey were perceived to be important. This study is believed to be important to the low performing schools as it indicated that the majority of the statements had not been implemented. Thus, Dale (2004) states that this "lends credence to the use of the Baldrige Criteria as a foundational assessment tool for continuous improvement in the schools on probation, especially in the area of student, stakeholder, and market focus" (p.102).
Edds (2000) conducted a study of two public school systems that had begun the implementation of the Baldrige Criteria for Education and the impact of the Criteria on school improvement, as related to teaching and learning and student achievement. The conclusions of this study "... reflected and importance of leadership, vision, capacity development, and focus on the students as a part of successful Baldrige implementation" (p. vii). Edds stated that the study indicated the importance and the challenges of implementing improvements in education. The Baldrige process moves from an isolated approach to a wider systems approach to improve the educational system and student achievement. Edds concluded in the study that the "Baldrige Criteria is an assessment system that can have a positive effect on student achievement and school improvement in the current system of public education" (p. 175).

In support of the ideas presented by Edds (2000), and Siri and Miller (2001) also stated that the process of the Baldrige criteria begins with "systems thinking". As connections are made there becomes a move to "systems integration" which requires new actions on the parts of the school.

A study conducted by Young (2002) was to better understand the effects of employing Baldrige-based quality management system into an educational organization. Young noted that there has been increasing use of the "quality management principles" in the educational setting. However, there has been little research published that indicate the benefits of using these strategies. The research led to the following conclusions: "A noted number of institutions employing the Baldrige model and data suggesting these numbers are increasing; the use of the Baldrige framework provided an organizational system for continuous improvement; the Baldrige model directed the attention and activities of..."
institutional members toward satisfying stakeholder needs; the Baldrige model's focus on management by fact sided organizational accountability and decision making; encapsulation of the Baldrige framework progresses through three distinct levels; and the results of analyzing several metrics at the various institutions suggested evidence of improvement in some areas of student performance, stakeholder satisfaction, and financial position" (p. 51).

Estes (2000) reports from the American Youth Policy Forum held on Capitol Hill, that the National Alliance of Business (NAB) in partnership with American Productivity and Quality Center (APQC) formed the Baldrige in Education Initiative (BiE IN) in 1999. There are 26 leading companies and educational organizations that make up BiE IN. The Baldrige Award Criteria is a nationwide reform effort to raise student achievement. The results of that effort indicate that Azalea Elementary, in Pinellas County School District in Florida, have invested teachers and students in the Baldrige reform process. Quality management techniques increased test scores up 20% over a two year period. The Baldrige Award has the aim toward student achievement and also to develop a new approach in the business community towards developing school partnerships. The addition of the educational component to the Baldrige Awards has appeared to have a positive impact on schools.

Conyers (2000) discussed that School District #15, in Illinois decision to use the Malcolm Baldrige framework, came from the reflection of the private sector, such as Motorola, that were deemed as ‘highly effective organizations’ around the world. Their school district’s desire to achieve higher levels of quality across the school district was motivation to understand the principles of the Baldrige Criteria which would help to develop a results-driven, systematic approach to organizational improvement. Conyers stated, “We are convinced that total quality can become a self-perpetuating methodology that can be used
effectively in schools and classrooms to bring about systematic, continuous improvements" (p. 22).

The Baldrige National Quality Program's Education Criteria for Performance Excellence is suggested to be a model which concepts hold merit. However, there is some skepticism to the model. Banister (2001) suggested that as a whole, Baldrige is short-sighted and narrow in focus. Banister focused on the first goal of Baldrige, "providing ever-improving educational value to students" (p. 5). It is not believed from this study that the corporate model can be an effective model to result in quality in schools. The five year study of an elementary school found the discourse in the model did not actually happen through implementation. Banister suggested that the model which consist of meetings, surveys and jargon, lead educators through a maze without any positive results.

Summary

It is ironic that the educational system is described as facing the same issues that industry faced more than fifteen years ago. Business leaders found that they could no longer compete in the international market as paralleled with educational institutions that are not providing satisfactory education for all students as evidenced in the No Child Left Behind reform. Education now faces the challenge of finding ways to meet higher performance expectations for all students. However, the processes of creating educational gains, as defined by the No Child Left Behind Act, are yet to be proven as successful.

Though Baldrige is thought to have potential for positive possibilities, there are also other potential issues. According to Seymour (1994), who write about quality management practices, the award could be used as an "accountability weapon" allowing states to produce Baldrige mandates. Educators, however, might have a negative attitude because the award
was not developed through the educational system. "The origins of the Baldrige are in industry. For many academics, such a heritage, no matter how cleverly or appropriately re-fashioned, will condemn the Award to illegitimacy" (p. 16). The evidence supports that the Baldrige Award's primary purpose is for use as a self-assessment tool. However, only a small percentage of organizations that use the criteria submit an application for the award. To accomplish the full potential of the award, there is a tremendous commitment of time and resources.

Karathanos (1999) stated that it is estimated that businesses spend 150 billion dollars a year on education and training, which matches the amount that the US spends on K-12 and higher education. Of the $150 billion, $40 billion is spent on education and training on quality principles. Chaffee and Sherr (as cited in Karathanos, 1999) stated that the purpose and significance of higher education have changed dramatically over the years although the institutional practices have not. Hubbard (as cited in Karathanos, 1999) echoed those sentiments stating that higher education as well as elementary and secondary education does not keep pace with the standards of quality that are necessary for the U.S. to keep pace with the global economy.

In order to make the quality-driven paradigm shift, the knowledge base must change. Baldrige holds potential as an effective model in education, as suggested by Seymour (1994), Siegel (2000) and Siegel (2001). Edin (2000) in his study found the Baldrige Criteria to have a positive affect on student's achievement and school improvement efforts.

Though there have been studies conducted on the Baldrige Criteria, few empirical studies of Baldrige outcomes indicated noted improvements according to Walpole and Noeth (2002). There are some difficulties with the premise of the Baldrige Criteria as indicated by

Banister states that the model holds some concepts that “hold merit”. Banister did not believe in the study that “quality in schools can be a legislated initiative that is from the corporate arena” (p. 59). Additionally, Fusco stated that researchers concluded that TQM principles used in business can not be directly adaptable to education. The Baldrige Criteria is also criticized by Arif and Smiley. Arif and Smiley stated, “...the quality principles that can be implemented in an assembly line environment cannot be fully applied in an educational setting”. Though these criticisms are made regarding the Baldrige Criteria, there is a lack of empirical evidence of the study of the Baldrige Criteria and the impact on state assessment scores. These statements cannot be made conclusively until such time that more evidence is presented.

In a study of seven low-performing schools, Dale (2004) explored the perceptions of the administration, faculty, and staff concerning the importance of the Baldrige Criteria and their beliefs as to the elements of the Baldrige Criteria being in existence prior to the actual involvement in the Baldrige implementation. The conducted study utilized a survey of seventy questions on the seven Baldrige Categories which requested a response on the importance and existence of the categories. The survey was designed to help clarify and verify information that was obtained in on-site assessment interviews.

The results of the study indicated that all of the statements in the survey were perceived to be important. This study is believed to be important to the low performing schools as it indicated that the majority of the statements had not been implemented. Thus, Dale (2004) states that this lends credence to the use of the Baldrige Criteria as a
foundational assessment tool for continuous improvement in the schools on probation, especially in the area of student, stakeholder, and market focus" (p. 102).

Edds (2000) conducted a study of two public school systems that had begun the implementation of the Baldrige Criteria for Education and the impact of the Criteria on school improvement, as related to teaching and learning and student achievement. The conclusions of this study "...reflected and importance of leadership, vision, capacity development, and focus on the student as a part of successful Baldrige implementation" (p. vii). Edds further states, "The primary implication for practice that emerged from the study emphasized the importance and challenge of moving improvements in education practice, resulting from the Baldrige Criteria, from isolated classrooms or schools into the wider environment as a way to improve educational systems and impact student achievement" (p. vii). Edds (2000) concluded in the study that the "Baldrige Criteria is an assessment system that can have a positive effect on student achievement and school improvement in the current system of public education" (p. 175).
CHAPTER III-METHODOLOGY

The purpose of this study is to compare Baldrige Schools and Non-Baldrige Schools to determine if there are differences in student achievement in elementary schools in Michigan. More specifically, this investigation will compare the impact between a Baldrige School and a Non-Baldrige School, in a select group of similar elementary Michigan schools, in rural, and suburban settings.

This study will use multiple sources to validate the findings. Quantitative data will be used from MEAP data and through surveys of principals. Qualitative data will be collected from principal interviews that will provide a “thick, rich description” of the schools. Triangulation as described by Patton (2002) stated that, “You include triangulation of data sources and analytical perspectives to increase the accuracy and credibility of findings” (p. 93). Using the principles of triangulation as described by Patton, an analysis of the data collected will draw comparisons between the quantitative, numerical data of the MEAP scores, and numerical data of the principal surveys; and the qualitative data collected through the interviews of the principals.

Population and Sample

Baldrige Schools, in this preliminary sample, were selected from a pool of Baldrige schools based upon availability. Schools were identified through the publication of Michigan Quality Council Awards Listing, from the years 2002 and 2003, and internet searches relating to schools utilizing the Baldrige Criteria. This study will be limited to three Baldrige Schools, based upon availability of those contacted.
Purposeful Sampling was used in identifying the three Non-Baldrige Schools. Three Non-Baldrige Schools were selected based upon matching profiles of Baldrige Schools. The profiles were compared with characteristics that included: enrollment of the school, grade span, classroom teachers (FTE), student/teacher ratio, school type, socio-economic status, locale code and ethnicity. The Great Schools and Search for Public Schools websites were used to determine comparable Non-Baldrige and Baldrige Schools.

Following are tables, which compare the matching profiles of the Baldrige and Non-Baldrige Schools. The Tables 1-3 indicate the enrollment and grade span; classroom teacher FTE; Student/Teacher Ratio; socioeconomic factors; location and ethnicity of each school.
<table>
<thead>
<tr>
<th></th>
<th>School A.1</th>
<th>School A.2</th>
<th>State Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baldridge</td>
<td>Non-Baldridge</td>
<td></td>
</tr>
<tr>
<td>Enrollment</td>
<td>477</td>
<td>529</td>
<td></td>
</tr>
<tr>
<td>Grade Levels</td>
<td>K-5</td>
<td>K-5</td>
<td></td>
</tr>
<tr>
<td>Classroom Teachers (FTE)</td>
<td>23.4</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>Student/Teacher Ratio</td>
<td>20.4</td>
<td>19.8</td>
<td></td>
</tr>
<tr>
<td>School Type</td>
<td>Public</td>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>% Receiving Free/Red.</td>
<td>23%</td>
<td>12%</td>
<td>37%</td>
</tr>
<tr>
<td>Locale</td>
<td>Urban Fringe of Large City</td>
<td>Urban Fringe of Large City</td>
<td></td>
</tr>
<tr>
<td>Ethnicity:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>15%</td>
<td>7%</td>
<td>18%</td>
</tr>
<tr>
<td>American Indian</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Asian</td>
<td>4%</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4%</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td>White</td>
<td>77%</td>
<td>81%</td>
<td>74%</td>
</tr>
<tr>
<td>Case Study Data - Schools B</td>
<td>School B.1</td>
<td>School B.2</td>
<td>State Average</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------</td>
<td>------------</td>
<td>---------------</td>
</tr>
<tr>
<td><strong>Baldrige/Non-Baldrige</strong></td>
<td>Baldrige</td>
<td>Non-Baldrige</td>
<td></td>
</tr>
<tr>
<td>Enrollment</td>
<td>550</td>
<td>582</td>
<td></td>
</tr>
<tr>
<td>Grade Levels</td>
<td>Pre-K-6</td>
<td>Pre-K-5</td>
<td></td>
</tr>
<tr>
<td>Classroom Teachers (FTE)</td>
<td>31.5</td>
<td>30.3</td>
<td></td>
</tr>
<tr>
<td>Student/Teacher Ratio</td>
<td>17.5</td>
<td>19.2</td>
<td></td>
</tr>
<tr>
<td>School Type</td>
<td>Public</td>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>% Receiving Free/Reduced</td>
<td>42%</td>
<td>34%</td>
<td>37%</td>
</tr>
<tr>
<td>Locale</td>
<td>Rural, outside MSA</td>
<td>Rural, outside MSA</td>
<td></td>
</tr>
<tr>
<td>Ethnicity:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>18%</td>
</tr>
<tr>
<td>American Indian</td>
<td>0%</td>
<td>&lt;1%</td>
<td>1%</td>
</tr>
<tr>
<td>Asian</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0%</td>
<td>&lt;1%</td>
<td>4%</td>
</tr>
<tr>
<td>White</td>
<td>100%</td>
<td>100%</td>
<td>74%</td>
</tr>
</tbody>
</table>
Table 3

<table>
<thead>
<tr>
<th>Case Study Data</th>
<th>Schools C</th>
<th>School C.1</th>
<th>School C.2</th>
<th>State Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldrige/Non Baldrige</td>
<td>Baldrige</td>
<td>Non-Baldrige</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment</td>
<td>267</td>
<td>328</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Levels</td>
<td>K-5</td>
<td>K-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom Teachers (FTE)</td>
<td>16.0</td>
<td>17.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student/Teacher Ratio</td>
<td>16.7</td>
<td>18.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Type</td>
<td>Public</td>
<td>Public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Receiving Free/Red.</td>
<td>25%</td>
<td>29%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Locale</td>
<td>Rural, inside MSA</td>
<td>Rural, inside MSA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>&lt;1%</td>
<td>2%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>3%</td>
<td>0%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>&lt;1%</td>
<td>0%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>2%</td>
<td>0%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>94%</td>
<td>98%</td>
<td>74%</td>
<td></td>
</tr>
</tbody>
</table>

The researcher will study and analyze the compared schools through a collection of data, surveys and interviews which include: MEAP scores over the most current three year period, school years 2002, 2003, 2004 results; surveys completed by the principals; and interviews with the building principals. The School Improvement Team System Level Check surveys for principals are designed to show the perceptions of the principals which will identify the indicators of success from the seven categories and their relationship to student
achievement. The principal interviews will identify the perceptions of the principals concerning the implementation, imporance, and application of the Baldrige Criteria.

Instruments

The Systems Check Levei III, Shipley and Associates (2000) has been adopted for use and will be completed by building principals. The Systems Level Check III is based on the Malcolm Baldrige Education Criteria for Performance Excellence. It provides a mechanism for analysis of the school in determining an understanding of the current capacity for continual improvement, which is needed to accomplish "performance excellence". The Systems Level Check III provides schools with a tool for first-level analysis. This analysis can be used as the basis for further exploration and action planning. Schools are able to critically analyze themselves and move to the next steps. The perceptions of school and leadership practices of principals will describe common practices, which are attributable to student achievement.

The MEAP (Michigan Educational Assessment Program) test is given annually in the state of Michigan to 4th and 5th graders. The MEAP test is based upon the state of Michigan benchmarks. According to the Michigan Department of Education, the Michigan Revised School Code (1997) and the State School Aid Act (1979) required the establishment of educational standards and the assessment of students' academic achievement. The Michigan State Board of Education, with input from educators throughout the state of Michigan, developed tests which were created for the purpose of determining "what students know and what students are able to do", in comparison with the Michigan Standards. The test has been given as the measure of student achievement in the state of Michigan and therefore provides a basis of an indicator of the success of achievement of Baldrige and Non-Baldrige Schools.
The fourth grade tests consist of Mathematics, and English/Language Arts, which includes reading and writing. The fifth grade students are tested in Social Studies and Science.

An interview will be held with each building principal to gather their perceptions about school characteristics and leadership practices. Interview questions will be used from The Malcolm Baldrige Award Criteria as a School Change Model: Evidence from the Field, David E. Edie, August 2000. The Baldrige Interview Guide has been adopted for the Baldrige Schools.

The Baldrige Interview Guide has been adapted for the Non-Baldrige Schools. The adapted instrument will be tested with four elementary school principals to determine if the adapted instrument is found to be a valid and reliable instrument to use in this study. Four Non-Baldrige school principals in Michigan will be randomly selected to participate in the pilot of the instrument. The researcher will conduct a one-to-one interview with the pilot building principals.

In this study the protocols for the interviews will be a telephone one-to-one interview with the researcher and the principal. The researcher will ask questions from the interview instrument. This data will be compiled and compared in a summative format as a part of this research study. The interviews will be summarized and specific responses will be categorized in each Baldrige and Non-Baldrige School.

Procedures

This case study design will be conducted through use of information from the public domain, surveys for teachers and principals, and principal interviews. The MEAP data will be collected through the Michigan Department of Education website. Principals will complete the School Improvement Team Systems Level Check III. Directions should be
followed as printed on the cover page of the document. In addition, a telephone interview will be held individually with each of the building principals to develop a narrative summary of their perceptions of the school.

Reliability and Validity

According to Shipley and Associates (2003), the Systems Check Level III, were designed by Jim Shipley and Associates in 1998. The Systems Check Level III was developed to simplify the Baldrige Criteria as it made its transition from business to education. The translation of the education version of the Systems Check Level III is to serve as a self-assessment and action-planning tool. Though most of the Systems Check Level III was designed for use by educators, there are some Systems Checks that have been designed for use in business and governmental agencies. Overall, the School Improvement Systems Check have been designed to allow for self-assessment, reflection and planning. The Systems Check has helped to facilitate a process utilizing the Baldrige Criteria core values and concepts. According to Shipley and Associates (2000) “these values and criteria are considered to be organizational best practices, are the foundation for developing and integrating all items on the Systems Check” (p. 8).

Interview Questions were derived from the dissertation of Edds (2000). The questions have been adapted for appropriateness to the Non-Baldrige Schools.

Data Analysis

This research will use an Independent Sample t-Test, to compare the means of two different samples, Baldrige and Non-Baldrige schools. The samples were selected from separate and distinct populations. The MEAP test analysis will utilize scores from the most current three school years, 2002, 2003 and 2004. This study will include an analysis of 4th
grade English/Language Arts and Math scores, and 5th grade Science and Social Studies scores. The MEAP test analysis data will be collected through use of the public domain. The compilation and analysis of the data will be completed through the use of SPSS software.

The case study will be developed through interviews with building principals and the collection of data through principal perceptions in the System Level Check III. The System Level Check III, used in this study has been developed as an evaluative tool for schools to assess their structures as learning systems. The data from the Systems Level Check III will be compiled by determining the number scored in each category. The in-depth case study of Baldrige and Non-Baldrige Schools will utilize the perceptions of the building principal to delineate common characteristics, which promote student achievement. This case study will employ the strategy of triangulation to provide a balance between test data, surveys and personal interviews with the building principals of each Baldrige and Non-Baldrige Schools.

Summary

Over the years, many reform efforts have been implemented to enhance the educational institution that has been established since the early 1600’s. The Baldrige Criteria has been presented as a framework to develop the success of school reform. In 1998 the United States Department of Education supported the Baldrige Criteria as a strategy for improvement for schools. In 1999, the Baldrige Criteria was implemented in six states, initiated by The Baldrige in Education Initiative (BiE IN). According to Siegel (2000) there was data to verify improvements since the implementation of Baldrige in several school districts.

The purpose of this study is to describe the Baldrige Criteria and to evaluate the Baldrige Criteria’s impact on student achievement in elementary schools in Michigan.
Through an analysis of the literature, research, case study, analysis of data, and interviews, this study will determine the impact of the Baldrige Criteria on the achievement of elementary students in Michigan, as indicated on the MEAP test.
CHAPTER IV-RESEARCH FINDINGS

Introduction

The perceptions of principals in Baldrige and Non-Baldrige schools in this study are described in the findings of the presented Case Studies. The Case Studies have been developed through collected demographics of the schools and principal interviews. Further information was collected from the Systems Level Check III data. In addition, MEAP scores were also examined to determine if they differed in the Baldrige and Non-Baldrige Schools. This study examined the perceptions of principals regarding school characteristics and leadership, and MEAP scores were used to determine if the rate is distinguishable when comparing similar Baldrige and Non-Baldrige Schools. Three Baldrige Schools and three Non-Baldrige Schools were examined in this study.

Case Study-School A.1

Background Information.

School A.1 is located in the urban fringe of a large city. According to the National Center for Educational Statistics (NCES) (2004) urban fringe of a large city is defined as placed within the Metropolitan Statistical Area of a large central city. The data from NCES 2004 indicated this public school has kindergarten through fifth grade and has an enrollment of 475 students. Twenty-three teachers serve 475 students which is a 20:1 student teacher ratio. The socio-economic status indicates that twenty-three percent of the students receive
free or reduced lunch. The school is diverse having 15% of the students African-American; 4% Asian; 4% Hispanic; and 71% being White.

Summary of Interview.

Principal A.1 presented the following information in the interview regarding the implementation of the current school improvement process.

School A.1 is a Baldrige School. The Baldrige Criteria was implemented in the school district in 2000. The school district's decision to implement the Baldrige Criteria as a School Improvement process was led by the superintendent. According to principal A.1, the school district was at that time in a “stagnant mode”, not making progress, and needed to do something to show improvement. The rationale for making that decision was partly due to the fact that the district had consultants which provided assistance with the District Strategic Plan. These consultants were Baldrige trained which perhaps influenced the decision to pursue the Baldrige Criteria. The district was using NCA (North Central Accreditation) as their school improvement model. The NCA model was rigid, in that it required setting up five-year goals that did not allow for making changes along the five-year period. The district recognized the need to be more reflective in its processes. There was an apparent need for the district to do something different and this process, Baldrige, "seemed to make sense".

Other school improvement processes that were considered were NCA processes. The school district examined the outcomes and transitions model. Those processes seemed heavy on the documentation, especially at the high school level. By comparison, Baldrige appeared to have all of the positive pieces of the transitions model, except without the extensive documentation required by NCA.
The adoption of all seven categories of the Baldrige Criteria is not fully completed in school A.1. The seven categories have been looked at and considered for all of the strategic plans, but "we have a long way to go in quite a few of them," reported principal A.1.

Principal A.1 believes they are not yet proficient in all of these areas.

The implementation process was structured through the training of all of the district administrators. The training was then implemented for all staff throughout the district. The implementation process has gone further ahead at the building level than at the district level.

The shared vision for using the Baldrige Criteria is still being developed with the school district stakeholders. The district staff has been given the "important pieces" of the vision; however, the community is still being worked with. The district continues to share information through public meetings such as school board meetings and PTO meetings. The PTO has begun to look at their organization, and using the Baldrige strategies, they will decide how they can improve their own organization.

The "buy-in" for the Baldrige Criteria has been an on-going process. The principal of school A.1 stated, "You don't just flick a switch and have total buy-in". The teachers are over time seeing there is purpose and Baldrige is making a difference. As they make the transition from learning about it to using it, more buy-in develops.

Teacher and community training has been a high commitment on the part of the school. 98% of the staff development has been committed to the Baldrige process. Staff meetings are for one hour each week and staff meeting time is used for the purpose of Baldrige training. The district has also made some commitments toward the continual training of staff. Administrators, teachers, custodians and secretaries have gone through foundational training.
Trained staff members have used these foundational experiences and designed
training to work with the PTO (Parent Teacher Organization). In their beginning process
they worked with the PTO to help them gain an understanding and utilize Baldrige strategies.
Parents in general however, do not necessarily have a grasp of Baldrige. They see data in the
hallway, students coming home with data folders and those sorts of things. There has not yet
been a systematic way to help parents understand what Baldrige is all about.

The major barriers to the implementation of the Baldrige Criteria have been
“change”. Change was described as difficult. Other barriers include resources, which have
been a hindrance to progress with Baldrige. Some of those resources include short cycle
assessments and other resources that would be used to look at data and analyze progress.
Another barrier has been the lack of time for staff to meet. “Given the fact that we are a
school, the teachers need to be with the kids, and the custodians need to be cleaning and
making sure the environment is adequate for kids to be in”. Resources were seen as a big
stumbling block.

The evidence that Baldrige is working is seen in the MEAP (Michigan Educational
Assessment Program) scores, which have improved. The principal stated the school district
uses MEAP scores to measure the impact of Baldrige. However, the principal believes there
are so many other things that have happened in the district. It is difficult to isolate one
particular thing that has caused the improvements.

Though Baldrige was seen as a contributor to improvement, the principal also noted
several other things that had happened over the past 5 to 6 years to improve student achievement.
Some of the other things that may have contributed to student achievement have been
curriculum alignment, focusing on the MEAP, class size, and change in staff. The principal
stated that the scores had definitely "gone up". "The MEAP scores have gone up. That is the bottom line. The MEAP scores reflect our stakeholders' requirements. Those are supposed to be "the measure" for that and those have gone up so, I guess that would be your data". The instructional practices have been affected in school A.1. The principal stated "the students have become more of a player in their own education". Teachers are no longer "independent contractors" and there have been more team efforts. The teachers look at the grade levels above them as customers, and parents as customers. It has forced teachers to look at the state requirements as non-negotiable.

The final comments from principal A.1 were that Baldrige had helped to make progress in the district. As principal A.1 reflects, there is a belief that going back to the previous system would not reach all of the students. Baldrige has allowed an opportunity to operate differently and to build a framework and foundation to meet all of the students' needs. An example by principal A.1 was given of how a hospital had data clearly displayed for their stakeholders to view. Resources had obviously been dedicated to doing this. A concern, for this school principal is whether or not this school district has the capacity to fully operationalize the Baldrige Criteria. "I think that's one thing that makes change hard for education. It's that we operate so lean, that there just aren't the resources to be able to do something that I know we need to be able to do to make a difference."

Case Study School A.2

Background Information.

School A.2 is located in the urban fringe of a large city. According to the National Center for Educational Statistics (NCES) (2004) urban fringe of a large city is defined as placed within the Metropolitan Statistical Area of a large central city. According to NCES
2004 School A.2 is a public school with 530 students. The grade levels of the school are kindergarten through fifth grade. There are twenty-seven teachers in the school with a student/teacher ratio of 20:1. The socio-economics of the school include 12% students receiving free or reduced lunches. The ethnicity of the school is: African-American 7%; American Indian 1%; Asian nine percent; Hispanic 1%; and White 81%.

Summary of Interview.

School A.2 is a Non-Baldridge School. Previously the school utilized NCA (North Central Accreditation) as their school improvement process. Most recently they have designed their own school improvement process.

The Non-NCA process began in the fall of 2003. The current school improvement process utilized by school A.2 is similar to the NCA structure but they have deviated from the use of the NCA model. School A.2 does not have a specific organization plan that they follow. They continue to do school improvement "without having a rigid plan in place". The current process they follow fulfills the requirements of the state for school improvement.

School A.2 hopes to have a Peer Review Plan. This process will work within their own school district utilizing peers and colleagues for review purposes. The process has included planning and studying data to determine the needs of the school. The schools in the district then put together goals and reported the goals through their annual reports to the department of instruction in their school district. Leadership teams were developed and goals were shared with the staff. Being in year two, they are currently implementing their goals.

The decision that drove them to not use the NCA process and develop a Peer Review Plan is that NCA had become "cumbersome", according to principal A.2. The rationale for making the change was a staff decision. According to principal A.2 they often felt so tied up
in the verbiage of NCA that they were not able to do what they felt was practical in terms of the goals for their buildings.

Other models of school change were examined through conversation with the director of elementary education about the Peer Review process. However, they did not look in-depth at other plans. Through networking on the web they were able to find available Peer Review Plans. Their desire was to have a school improvement process in place without the rigidity of the NCA process.

The implementation process was structured by allowing staff members to volunteer to represent the various levels of the staff. The elements of the school improvement process have been to review data and use the evidence of the data for their building needs and develop goals. They dialogue with staff members to align the district curriculum objectives and benchmarks at each grade level. The evidence of the needs and the objectives are then aligned. Using the input of the staff representative, through the building leadership team, goals were created and strategies were investigated to best help meet those needs.

The shared vision was created through staff representatives that created the plan and then shared information during staff meetings, building in-services, as well as PTO meetings where parents and stakeholders were present. The teachers and community have been supportive of this process. The dialogue that is shared indicates staff members and the community are supportive.

Training was not felt to be necessary since they were transitioning from a very similar process. The principal believed the previous NCA process had given enough insights to the current Peer Review Plan that they were implementing. The same process was used for the Peer Review Plan as it had been with NCA. The process included reviewing data, studying
the data and determining where they were in the process. The next steps included developing the goals which were aligned with the district goals.

The barriers to implementing this process included not having a structured format to follow. In addition, the principal noted there was a lack of the “so called peer group” and there was not a visiting team, as the once NCA process provided. Challenges have been presented due to the fact they have not yet had the opportunity to “bounce” their plan off of their paired school. The Peer Review Team part of the plan has not yet materialized.

Principal A.2 explained evidence of the school improvement process working is they know they have strategies in place. One staff meeting a month is committed to discuss the strategies that are being implemented. They also use half-day in-services to talk about what worked and what did not work and then modify what was being done.

Data to demonstrate student achievement is being collected during this first year of implementation. Baseline data has been collected, however there is not data at this point to support increased student achievement. When the 2005 MEAP scores become available they will look at their goal areas scores, MEAP math and writing scores, to see if there are any improvements.

Instructional practices have been affected in the two goal areas, writing and math. There is a sharing of success and issues with the implementation when there is staff meeting time to do so. Classroom teacher are implementing strategies in math and writing, which are the areas of focus.

The final thoughts of principal A.2 included discussions of pursuing a new NCA process that involves peer review within the district. They are going to discuss this process with an area school that is already involved in the process. Principal A.2 believes this
process could provide more of a framework, so they do not have to create something themselves.

One of the challenges for this school has been the participation level of parents in the school improvement committee which has been non-existent. Parents are being kept informed of the school improvement progress through monthly newsletters and PTO meetings. The school desires to have a PTO parent that is willing to attend their building improvement meetings.

Another challenge is the duplication of reporting that is expected from their school. Principal A.2 stated they are trying to "deal with the new written pieces that are required by the state" without the additional documentation that is needed for NCA. Duplicating the same information from different sources has become cumbersome.

Comparison of Schools A.1 and A.2 Interviews

Interviews: Brief overview of school responses A.1 and A.2.

What is the current School Improvement Process?
A.1: Baldrige
A.2: Peer Review Plan

What were the distinct forces that drove the decision to implement the school improvement process?
A.1: The implementation of the Baldrige Criteria was dictated by the superintendent and administrators in the school district. Though other school improvement processes, through NCA, were considered, the Baldrige Criteria was sought to present a different strategy to increase student achievement.
A.2: The NCA process had become cumbersome, therefore, the staff decided to select another process. They created goals without being tied to the rigid process of NCA. Were there other models of school change examined prior to deciding on Baldrige?

A.1: Other modes of NCA were examined and considered. However, none seemed reflective of the needs of the district. The Transitions process of NCA was heavy on the need for documentation and drove the decision to consider another process.

A.2: Considerations were made through examination of Peer Review Plans on the web. Conversations were held with the director of elementary education.

A.1: The seven categories of the Baldrige Criteria have been looked at and considered in all of the strategic plans. There is a long way to go in quite a few of the categories.

A.2: The elements of the school improvement process are to review data; use the data as evidence of needs; dialogue with staff, align with district curriculum objectives and benchmarks at each grade level; staff representatives from each building leadership team create goals and investigate strategies that best meet the needs.

How was the implementation of the school improvement process structured in the district?

A.1: Training began initially with administrations and gradually all of the teachers were trained and other staff members.

A.1: Volunteers were solicited to represent various levels of the staff. They looked at what was being implemented in both math and language arts and determining where the needs were.
How was the shared vision for using the school improvement process arrived at among the school stakeholders?

A.1: The staff has gotten the vision from the superintendent taking a strong stand about the direction the district was going in. There have been communications in district meetings and school meetings as well as through written materials for the school stakeholders.

A.2: Information was shared at staff meetings for the staff and at PTO meetings for parents and stakeholders.

Do you believe there has been buy-in by the teachers and the community of the school improvement process?

A.1: Buy-in for the criteria has been an ongoing process in school A.1. Through continuous emphasis of the Baldrige Criteria the staff and stakeholders have gained better understanding and purpose for the school improvement process. Weekly staff meetings have been committed to the training of teachers. The district also continues to train the administrators, teachers, custodians and secretaries. School A.1 also works with the PTO in providing them with training. The parents are at the beginning phases of understanding as their children are exposed more to the strategies of Baldrige. Data is one of the strategies that are used to help parents understand and brings about the shared vision for all members of the school community.

A.2: It is believed that teachers and parent stakeholders are supportive of the plan.

What have been the strategies for training teachers and the community for your school improvement implementation?
A.1: Weekly staff meetings have been used for training teachers in the school for A.1. The district also provides continuous training for the staff members. The PTO is currently being trained in the processes as well.

A.2: Training was not deemed necessary in the new Non-NCA process. The previous NCA had provided them with a process to follow.

What have been the major barriers for school improvement process implementation?

A.1: There was recognition first of all that change is difficult. In addition, the major barriers for Baldrige implementation have been in lack of time and resources to commit to this process. Since it is important that each employee be able to fulfill their obligation to the positions that they hold, it is a challenge to find the appropriate time to continue training and meetings. Also, the principal of school A.1 believes that there is a need for data collection and presentation of data on an ongoing basis. However, there are a lack of resources such as short cycle assessments, and resources to look at and analyze data in a readable format.

A.2: Not having the structure format that NCA provided has been a barrier. The Peer Review Plan was developed to have a peer group. This has not yet been implemented.

What evidence is present that the school improvement process is working in the district?

A.1: There is evidence that Baldrige is working in the school and school district. The MEAP scores have improved. Principal A.1 stated that there are other things that have been happening in the district as well that could be also impacting the improved MEAP scores. Those things are curriculum alignment, focus on the MEAP, class size reduction, at-risk strategies and a change in staff. The principal suggested that he did not know if these strategies were a cause or effect of the increased scores.
A.2: Right now teachers are collecting data. The baseline data has been collected and it is anticipated that more data will be collected to compare. MEAP data from this year will be looked at to determine if there are any improvements in math and writing.

How have instructional practices been affected by implementing the school improvement process?

A.1: The instructional practices have been impacted as the students have become more involved in their education. Teachers have become more reflective in their practices. There is more of a concern for their "customers", the teacher, the grade above, parents, and the state requirements. Teachers no longer work in isolation but work as a team.

A.2: Specific direction has been given in classroom instruction in math and writing. Successes have been shared and issues with the implementation process are discussed during staff meetings when there is time to do so.

Overall Comments:

A.1: "I know that funding is a big issue right now in schools, and we are definitely under funded. But I think that even if you gave us a healthy increase in funding, we’re still not going to be able to reach all kids with the system we used prior to implementing Baldrige".

Principal A.1 is concerned about the lack of funding resources to help reach the fullest capacity that the Baldrige Criteria can offer.

A.2: There have been challenges in the new process. First the peer review with in the district has not yet materialized. They are looking at other school district that may provide a model to help them. Another challenge is in having parents become more actively involved in the school improvement process. There are so many various reports that are requirements of the state that managing them all has been also a challenge.
Case Study School B

Background Information.

School B.1 is located in a rural community. According to the National Center for Educational Statistics (NCES) (2004) rural is defined as a place with less than 2,500 people and coded rural outside a Metropolitan Statistical Area. According to NCES (2004) this public school has 550 students. The grade levels are Pre-Kinder garden through sixth grade. There are 32 teachers, with a 17.5:1 student/teacher ratio. Forty-two percent of the students receive free or reduced lunches. The ethnicity of the school is: less than 1% African-American; 0% American Indian; less than 1% Asian; 0% Hispanic; and 100% White.

Summary of Interview

School B.1 is a Baldrige School. The Baldrige Criteria was implemented in the school district in 2000.

The school districts decision to implement the Baldrige Criteria as a School Improvement process was the desire to “just get better”. The rationale used in making the decision is it fit into the previous CIP (Continuous Improvement Process), their school improvement process. The CIP process was based on Baldrige, but only included the academic performance area and not the other six categories. School B.1 also worked on Strategic Planning but not with much depth. There were so many areas the school district wanted to work on, instead of a process that was just for the teachers in the classroom.

Other school improvement processes were not considered since they already had a process that they believed was effective for them. However, they were in need of a process
that could be expanded to impact other areas in the district. They wanted something that would “fit” into what they were already doing.

The implementation process for Baldrige Criteria was implemented slowly. School B.1 utilized CIP and modified it to fit into the Baldrige Criteria as they moved along in the process. The process had to be modified to encompass all of the seven categories. The Baldrige Criteria process included all seven categories which they worked toward developing a common understanding for everyone. Every spring the district has a strategic planning meeting where long term and short term goals were set. In addition, Leadership teams met on a monthly basis.

The shared vision for using the Baldrige Criteria naturally evolved because of work that was already being done in school improvement related to the Baldrige Criteria. There was not a specific strategy to share the vision, “it was just an evolution, and it just made sense”.

There was some resistance to Baldrige because it was a change from CIP. There was not complete buy-in initially, however since the Baldrige Criteria is a participatory management system everyone, including the stakeholders, can be a part of school improvement. All of the data is being displayed in the lobby and the teachers lounge so that “teachers can get up close and personal to the data”. Principal B.1 further stated, “So those are the kinds of things that let me know that we have buy-in and everybody knows what everybody else is doing and why we are doing it.”

Other forces like No Child Left Behind (NCLB) also helped the buy-in process. Principal B.1 stated Baldrige was almost a perfect match for NCLB. Baldrige fit nicely with No Child Left Behind requirements and for all of the Title I requirements.
Principal B.1 gave an example of how the Baldrige Criteria helped to fit into the requirements of NCLB and Title I. At a Project Management Team meeting, the Title I Director came to their table and began discussing a report that was needed. The teachers at the table realized the report was something they already had done and completion of the Title I report would require pulling a few pieces together to accomplish it.

The strategies for training teachers and the community for Baldrige implementation have been addressed through the application for the Michigan Quality Council (MQC) Award. For the past three years, school B.1 has been working on an application for the MCQ Baldrige Award. Prior to the site visit from MQC, school B.1 was able to self-evaluate and determine where they had opportunities for improvement and areas they were doing well. A part of the award application involved compiling data. Teachers were able to see data all in one place, which had a profound impact on them. Principal B.1 stated, "We knew before they even came where we were falling short, where we had opportunities for improvement. And, we could also see crystal clear how far we had come and how well we were doing."

Additionally, the principal trains new teachers, and the principal works with staff members individually as necessary. In the principals' office she has everything visually displayed on a board. The vision, goals, beliefs, continuous improvement strategies, professional development plan, the actions plans for each of the core content areas, and the decision making process are displayed.

One of the major barriers to the implementation of the Baldrige Criteria has been time. Communication was also stated as a barrier. Principal B.1 stated that the magnitude of Baldrige is sometimes difficult to communicate to "everyone, community, staff, stakeholders, even our students". "Getting it down to the student level has been a challenge for us".
There is evidence to substantiate Baldrige is working. **Internal and external assessment scores have improved. MEAP scores indicate improvements as well as the school report card. Staff focus and morale has also improved. School climate has substantially improved. There is anecdotal proof as well as documentation which have been collected from surveys.**

The most notable change in instructional practices has been seen in the change of expectations teachers now have for their students. Since the implementation of Baldrige the expectations for students have become high. Principal B.1 states, "And that has changed like 180 degrees since we've implemented Baldrige to the point of, you know, all students can learn". The principal reports that there are several resources and supports to help make these expectations happen. Teachers willingly seek those resources themselves and make recommendations to improve student achievement.

In conclusion principal B.1 stated that data has been most helpful in getting ideas across for changes needed to be made in instruction and how teaching and learning is approached. Data has been the "key driving force" to make things much clearer. Principal B.1 stated, "The data has been the key driving force and when we started, collecting it and reporting it and sharing it, it made everything much more clear".

**Case Study School B.2**

**Background Information.**

School B.2 is located in a rural community. According to the National Center for Educational Statistics (NCES) (2004) rural is defined as a place with less than 2,500 people and coded rural outside a Metropolitan Statistical Area. NCES 2004 data indicated there are 582 students in this school. The school serves grades Pre-Kindergarten through fifth grade.
There are 30 teachers, with a 19:1 student/teacher ratio. There are 34% of the students receiving free and reduced lunches. The ethnicity of the district is less than 1% for African-American, American Indian, Asian, and Hispanic. The district is 100% White.

Summary of Interview:

School B.2 is a Non-Baldrige School. The school board has established a school improvement process for the school district. This process has been in place since 1999.

School B.2 is a part of a district that has established its own school improvement process. The school board sets the goals, which are district-wide goals. Each building is required to meet those goals. There are two academic goals, one, which coincides with MEAP achievement and the other, coincides with district quarterly assessments. The third goal is related to parental involvement.

About five years ago the schools in the district were required to report the MEAP scores to the school board. The school board was not pleased at what the reports indicated. A school board retreat was designated to allow the administrators and school board members to develop a plan to improve student achievement. The design of the plan was mandated by the school board. Other models were not considered in making this decision.

It was at this time the administrators and school board developed goals for the school district. The school board and administrators developed two academic goals and one parental goal. The parental goal is new for the 2004-05 school year. Previously the schools had goals regarding building cleanliness.

The school improvement process has been adopted and implemented in its entirety. Each of the levels, elementary, middle and high school, in the district were asked to create quarterly assessments that aligned with the state standards and benchmarks. The results of
the quarterly assessments were to be graphed and presented at school board meetings quarterly. The graphs would be displayed on a bulletin board in the school boardroom.

The building administrator implemented the process. The principals' were required to communicate to their staff they would give quarterly assessments, and the results would be reported and published. The Intermediate School District assisted them by providing resources for schools to train their teachers. Individual buildings created a plan by which they would train their staff and implement the goals. School B.2 created curriculum teams which met once a month to disaggregate MEAP scores. The curriculum team then met with the grade level teams to improve curriculum alignment based upon the data from the MEAP scores.

The shared vision was developed by utilizing a team approach in developing a mission statement. The staff designed a description of what they wanted their students to "look like" in each academic area. Beyond that they began to develop the "what do we have to do to get there?" The teams noted that they needed to have consistent expectations. Each curriculum team had the power to make recommendation for curricular changes.

The reporting of the data has helped teachers to "buy-in" to the process. As teachers have seen the scores improve there has become a desire from within the ranks of the teachers to go to the next level.

The curriculum teams developed the strategies for training teachers. Teachers are allowed time to "do some real digging and studying and observing". Teachers have the opportunities to visit other schools where they seek opportunities to gain new knowledge and gain strategies for their own school.
The barriers to implementation of the school improvement process have been "change". "Change has been most difficult", stated principal B.2. Principal B.2 stated that her superintendent, being a very wise man said, "What they think that you're saying to them is what they've been doing wasn't right". Principal B.2 believes helping teachers to understand new research, and helping them to understand what is being done is in the best interest of students. Change sometimes means coming out of personal and professional comfort zones.

The evidence of improved scores has indicated the school improvement process is working in the school. A collaborative environment has been developed, whereby teachers approach others to find out what is happening in other places where things are going well. As scores increase teachers gain more confidence and are more willing to take risk. The quarterly assessments are presented to the school board on a quarterly basis and MEAP scores are reported annually to the school board.

The school district also requests that the school "benchmarks" itself with another school. They look in their county and then beyond to find a school with similar population and socio-economic factors. If a school is found to be doing much better than their school they contact them and talk to them about what they are doing.

Instructional practices have changed as a result of this process. First, staff meetings have changed from "traditional" meetings to having meetings such as book discussions. Utilizing current research, the classroom teacher, is able to become more reflective about their classroom practices and formulate best practices in their classrooms.

In the final comments principal B.2 stated holding people accountable with data has made a significant difference. Data is used in this school as a tool for improving rather than
a punitive tool. Principal B.2 states, "Data is a tool for you to learn how to get better and that is probably the most powerful thing to get into place. That any assessment we give the children is just not a reflection on their ability to learn, it's our ability to get information across. Not that what you are doing is wrong, but we may need to just try it in a different way. The school board has requested the data not just be posted in the boardroom but also in the staff workrooms, so data serves as a constant visual of where they are and where they need to go."

Comparison of Schools B.1 and B.2 Interviews

Interviews: Brief overview of school responses B.1 and B.2.

What is the current School Improvement Process?

B.1: Baldridge

B.2: School Board and Administrators Establish Goals for the District

What were the distinct forces that drove the decision to implement the school improvement process?

B.1: "The desire to get better."

B.2: A MEAP report to the school board precipitated the necessity to make changes. Were there other models of school change examined prior to deciding on Baldridge?

B.1: Baldridge seemed to be the best fit considering that the previous process was based on one aspect of the Baldridge Criteria.

B.2: There were no other known models explored.

What are the elements of the school improvement process and has the school improvement process been adopted and implemented entirely in your district?

B.1: Yes all seven of the categories have been adopted and implemented entirely.
B.2: The elements of the school improvement process have been implemented in entirety. Schools developed district quarterly assessments to align with the state standards and benchmarks. The data is graphed on a quarterly basis.

How was the implementation of the school improvement process structured in the district?

B.1: Training began initially with administrations and gradually all of the teachers were trained and other staff members.

B.1: Volunteers were solicited to represent various levels of the staff. They looked at what was being implemented in both math and language arts and determining where the needs were.

How was the shared vision for using the school improvement process arrived at among the school stakeholders?

B.1: The shared vision evolved from the work that they were already doing in school improvement.

B.2: Mission statements were developed for each goal area. There were also descriptions of what the students should look like.

Do you believe there has been buy-in by the teachers and the community of the school improvement process?

B.1: In the beginning there was resistance to the process because it was a change from the previous process. As more people became involved in the process there became more buy-in.

B.2: Reporting of the data has helped buy-in. Teachers are now engaged and want to know what they can do to get to the next level.
What has been the strategy for training teachers and the community for your school improvement implementation?

B.1: Through the use of the Michigan Quality Council Award application, the school learned a lot about themselves, which helped them to develop a self-analysis and develop an action plan for change.

B.2: The curriculum teams help to develop recommendations for training. The local ISD provides much of the training for the staff.

What have been the major barriers for school improvement process implementation?

B.1: Time has been a major barrier for school improvement process implementation. The "hugeness" of the process is another barrier. Being able to communicate to everyone all the time has also been a barrier.

B.2: The change process has been a barrier to the school improvement process.

What evidence is present that the school improvement process is working in the district?

B.1: Improved student performance has been the indicator that the school improvement process is working in the district. Improved staff focus and staff morale are also indicators of success.

B.2: Increase student scores have shown that the school improvement process is working. Teachers have become more collaborative.

How have instructional practices been affected by implementing the school improvement process?

B.1: The expectations for students have changed. Since the implementation of Baldrige, there seems to be the belief that all children can learn.

B.2: Teacher meetings are now book discussions involving best practices.
Overall Comments:

B.1: Principal B.1 stated, "Data has been most helpful in getting ideas across for changes that need to be made in instruction, and in materials and in how we approach teaching and learning".

B.2: A statement was made to principal B.2, "In God we trust, all others must have data". Understanding that data is a tool for improving is critical and can be the most powerful tool.

Case Study Schools C

Case Study School C.1

Background Information.

School C.1 is located in a rural community. According to the National Center for Educational Statistics (NCES) (2004) rural is defined as a place with less than 2,500 people and coded rural inside a Metropolitan Statistical Area. NCES (2004) data indicated this public school has 270 students. The grade levels are Kindergarten through fifth grade. There are 16 teachers, with a 17:1 student/teacher ratio. Twenty-five percent of the students receive free or reduced lunches. The ethnicity of the school is: less than 1% African-American; 3% American Indian; less than 1% Asian; 2% Hispanic; and 94% White.

Summary of Interview.

School C.1 is a Baldrige School. The Baldrige Criteria was implemented into the district nine years age. About one to two years into the process after the collection of feedback from the stakeholders, the documentation was "shelved". About that time a new superintendent entered the district with a "different philosophy". The Baldrige Criteria became non-existent for a few years following. Approximately two years later, an ISD consultant and a business partner helped to re-establish the criteria into the district. Strong
leadership for the Baldrige Criteria came from the curriculum director. A new
superintendent entered the district once again. There were also administrators who had
become grounded in the philosophy of Baldrige and desired to continue utilizing the Baldrige
Criteria as a school improvement process.

The district desired to have a process, which was not the “flavor of the month”. In
examining other exit outcome types of processes, they believed none of the other process,
such as NCA, helped them to align the system. Baldrige helped them to become strategically
aligned, having “all of their arrows going in the same direction”. Principal C.1 stated, “We
were just doing a bunch of things but nothing was strategically aligned. So we were looking
for total alignment, something that would give us this integrated management system and the
Baldrige Criteria fit that”. In considering Baldrige as their school improvement process, they
considered best practices. In the search for a process of continuous improvement which was
data driven, Baldrige appeared to fit what they were looking for.

The Baldrige Criteria has not been adopted throughout the entire district. Those
aspiring to use this process are able to, by moving forward with the process in their
individual buildings.

A two-day workshop was the initial training for teachers that desired to investigate
the Baldrige Criteria. Principal C.1 used the approach of allowing teachers the choice to
participate in the training sessions. Training was initiated by outside consultants and further
training was done by a district Baldrige trainer. The principal also modeled Baldrige
strategies during staff meetings.

The principal also worked directly with those that were interested in the Baldrige
Criteria. The principal began by using the Classroom Systems Level Check, by Skipley and
Associates. Outside consultants were instrumental in providing initial training for the volunteers from the staff. The curriculum director then became the trainer in the district, providing ongoing training for the staff in the district. Initially, there was an overview of Baldrige, development of mission statements and data folders. The emphasis was highlighted on helping the students to understand "why they are in school".

After the training, teachers tried out the practices in their classrooms. When they met again the teachers came back with mission statements and stories about their experiences. One of the kindergarten teachers utilized the Baldrige strategies with the morning group of students and had given little exposure to the afternoon group of students. When looking at the graphs of the data, on letter recognition, there were amazing results. The morning class had reached their goal and the afternoon class did not have the same results. The morning class that had "bought into it" because they had developed the action plan for their learning.

The principal explained they worked on codes of cooperation, mission statements, class average graphs, data folders, action plans and goal. The principal refrained from calling the practice Baldrige and referred to it as Best Practice. As the leader, the principal attempted to model the practice and help individuals. At staff meetings, the principal modeled quality tools. Every two weeks volunteers would meet to discuss Baldrige practices. Others became interested as they saw the excitement of what the volunteer teachers were doing. The volunteer's testimonies helped the doubting and skeptical teachers.

The shared vision was arrived at among school district stakeholders by allowing them to be a part of the initial process. The Pinellas (Florida) model was used as a model for their strategic plan. The second time they implemented the Baldrige Criteria they used a much
shorter version. They included parents, business partners and members from their school community. They worked with consultants that helped them to determine what they were doing well and what needs should be addressed. They looked at A Nation at Risk and drew from other statistical banks through the process. The number one aim that drives their system is student achievement.

As an indication there has been buy-in from the teachers and community, a decision was made to discontinue using the Terra Nova as their measure of student achievement, primarily because they did not believe it assessed the Michigan state benchmarks, frameworks and standards. Teachers were asked to develop a district K-12 assessment program. Teachers were given a stipend to develop assessments based on the objectives. They now have a K-12 online assessment program that was all done in house. They have graphs and charts that indicate improvements in their scores.

The major barriers in this implementation process have been so many changes in superintendents and building administrators. Currently there are parts of the system that are functioning but others that are not yet utilizing the strategies. Since there have been so many changes in the administrators in the district, some of the people do not have an "understanding and embracing of the integrated management and different components", instead there are a lot of holes. The principal believes that the goal should be to be able to flow-chart what they are doing. The principal believes with a "resurgence of refocus" they will be able to accomplish more with Baldridge. They have the assessments, which have proven to be positive for the district; however there are other things that are important within the system that need to be done consistently.
The evidence that Baldrige is working is indicated in their test scores. MEAP is the district indicator of student achievement, as well as their quarterly assessments. They have seen continual improvements in both areas. The principal would like to see the district go back to “benchmarking” which was believed by the principal to be an effective practice.

The instructional practices have been affected by the Baldrige Criteria as you can see in the student achievement scores. Classrooms now have data. Students have workbooks and they fill in their individual graphs. Mission statements are integrated into the classrooms. The process is becoming so embedded that students will enquire, for example as to why a teacher does not have a mission statement. Students at the higher grade levels are able to develop their own mission statements utilizing the language and experiences from the previous grades to help them. The children want to see their data from assessments move quickly.

In hindsight the principal stated she realizes her understanding, though important, is not the most important. Implementation at the classroom level is most important because that is where it makes a difference.

Now that this system has been implemented into the district, principal C.1 does not want to go back to the old system. Principal C.1 states, “They call the old system the train, and the new system, in the air like a plane”. Student achievement scores have been going up. Teachers have gained understandings about their part in educating students. The Baldrige system has generated continuous improvement for students and an excitement for teachers as they see data that indicates this growth. Principal C.1 stated, “You’re really going to have a fight on your hands if you try to undermine Baldrige. Sticking our necks out for something that we really believed in because we could see that it was really making an
effect on our kids. It was really impeding their learning. We could see student achievement going up. We could see teachers because they helped write the quarterly assessment…that was the best exercise we possibly could have ever had for teachers not really understanding why they needed to teach certain objectives in a certain nine-week period and be able to test those. Then they started to reflect and rethink how they could make it better so kids could embrace and learn what they were supposed to learn…”

Case Study School C.2

Background Information.

School C.2 is located in a rural community. According to the National Center for Educational Statistics (NCES) (2004) rural is defined as a place with less than 2,500 people and coded rural inside a Metropolitan Statistical Area. NCES 2004 data indicated there are approximately 330 students in this school. The school serves grades Kindergarten through fifth grade. There are approximately seventeen teachers, which is a 19:1 student/teacher ratio. There are 29% of the students receiving free and reduced lunches. The ethnicity of the district is: 2% African-American, 0% American Indian, 0% Asian, 0% Hispanic and 98% White.

Summary of Interview.

School C.2 is a Non-Baldrige School. The current school improvement process is NCA and has been in place for approximately eight years at the high school level and five years at the middle and elementary levels.

School C.2 is a part of a district that has established NCA as its school improvement process. The superintendent was the driving force to implement NCA. The superintendents’
vision for the district has brought about many changes for the district. Principal C.2 was not familiar with the rationale for selecting NCA as a process.

The implementation of NCA came from the administrative level. The structure of the school improvement process is designed at the building level. Buildings have the discretion of how to develop the format of their school improvement process. However, following the guidelines of NCA, school C.2 has three goals. The process was imposed upon the staff as a mandate. Now it is described as “a way of life”. The staff has been allowed to select goals and therefore they feel ownership, which has helped them to buy-in to the process. However, essentially because this process was imposed as a mandate there were several staff members that were not buying-in to the process.

Initially the high school principal implemented the process. The high school principal had community members as a part of the team. The principal used motivational techniques, such as the purchase of T-shirts, to encourage the team in a positive way. The other schools in the district followed the pattern that had been established by the high school principal. Buy-in was a slow process. The staff’s recognition that the NCA process was not much different from what they had already been doing, except “putting it on paper” helped them to move forward. The teachers selected the goals; therefore the principal believed there was buy-in for the process. Principal C.2 stated, “So it was a combination of resignation to that OK we have to do this and then realizing that it wasn’t awful or anything like that”.

The model for training the staff was allowing teachers to go to other buildings. The teams went to other schools which was very helpful. The high school principal modeling for the process was described as helpful. The high school principal was extremely organized and meetings were always structured in a good way.
NCA is considered by principal C.2, to be a process of "writing down what we’ve already done". The evidence that the NCA process is working is that the process has helped them to focus. They have an extensive curriculum focus that allows them to look at the curricular areas every year. Each curricular area is reviewed every five years. Without the NCA process, principal C.2 is not sure if they would have such an established process for reviewing goals and curriculum.

There was some uncertainty as to the effect of the NCA process on student achievement. There were other contributing factors as well that may have impacted the progress in the district. Though there have been improvements in the student achievement data, the data indicating improvement has not been published but readily available.

Instructional practices have been impacted by NCA because the focus is on a particular goal area. The in-services are structured for those goal areas and everything revolves around the goal area. Teachers teach what they have to so scores can go up.

There have not been many barriers to the implementation of NCA. One of the barriers during initial implementation when there was resistance to the process, however, mostly at the high school level. After “getting over” the initial mandate they have participated in the process. In addition, another barrier, NCA is unable to provide visiting teams for this school district, therefore they lack one of the components of the NCA process.

The final remarks from principal C.2 are they have strong community partnerships. Parents are on the team and they feel they are an important part of it. At the end of each year the superintendent hosts a dinner for the school improvement teams. There is an opportunity for each building team to share their accomplishments for the school year.
Comparison of Schools C.1 and C.2 Interviews

Interviews: Brief overview of schools C.1 and C.2.

What is the current School Improvement Process?

C.1: Baldrige

C.2: North Central Accreditation

What were the distinct forces that drove the decision to implement the school improvement process?

C.1: The Baldrige Criteria process was initiated by an ISD consultant and business partner.

C.2: It was the superintendent's decision.

Were there other models of school change examined prior to deciding on Baldrige?

C.1: Desired to find a model that was strategic, that would help to align the system and provide continuous progress for students.

C.2: There were no other known models explored.

What are the elements of the school improvement process and has the school improvement process been adopted and implemented entirely in your district?

C.1: The Baldrige has seven categories. All seven of the categories have not been implemented at this time.

C.2: The NCA process is implemented through a team approach. It has been established in its entirety.

How was the implementation of the school improvement process structured in the district?

C.1: Workshops were offered on a voluntary basis to the staff.

C.2: The implementation came from the administrative level. Each building decides how the NCA process is structured.
How was the shared vision for using the school improvement process arrived at among the school stakeholders?

C.1: The Pinellas County, Florida was used as a model for their own process.

C.2: The process was implemented as a mandate.

Do you believe there has been buy-in by the teachers and the community of the school improvement process?

C.1: Yes. The activity of the teachers indicates their buy-in into the process.

C.2: Teachers eventually learned that the NCA process was not unreasonable for them.

What have been the strategy for training teachers and the community for your school improvement implementation?

C.1: Outside of the district trainer’s trained teachers. A district trainer of trainers now facilitates training.

C.2: NCA is unable to provide a Visiting Team. No information regarding training was given.

What have been the major barriers for school improvement process implementation?

C.1: There have been many administrative changes that have caused a lack of consistency in being able to get the “total system up and running”.

C.2: The only barriers were in the initial stages when there was resistance to the process.

What evidence is present that the school improvement process is working in the district?

C.1: Test scores. The schools also “benchmarked” with other schools.

C.2: The NCA goals are used as the way to measure if they are making progress.

How have instructional practices been affected by implementing the school improvement process?
C.1: Teachers that have embraced the process have seen the evidence of student achievement and have embedded Baldrige practices in their classrooms.

C.2: In-services for the goal areas are presented for the staff. Teaching is focused on what students need so that scores go up.

Overall Comments:

C.1: Since the implementation of the quarterly assessments, teachers have a better understanding of what they need to teach. Data has helped them become more reflective and are more adaptable in their teaching practices.

C.2: The parent component has been very important in their school district.

Research Findings of Baldrige and Non-Baldrige Schools

Research Findings in Baldrige and Non-Baldrige Schools Interviews:

To further compare an overall Baldrige compared to Non-Baldrige School principal perceptions the responses were analyzed comparatively. The following responses are a synopsis of the Baldrige and Non-Baldrige school principal responses to the interview questions. The responses were compared for common general themes.

Question 1: Were there distinct forces that drove the decision to implement the school improvement process?

The summary of the Baldrige schools: Dictated, desire to get better, consultants convinced them of process. The summary of the Non-Baldrige schools: Staff selection, board directive, mandate from the superintendent.

The theme from the Baldrige and Non-Baldrige school is as follows: Both Baldrige and Non-Baldrige principals perceived that there was a need for improvement. In most
instances leadership was the driving force to make the decision for the change in the school improvement process.

Question #2: What was the rationale used in selecting the school improvement process?

The summary of the Baldridge schools: Needed process to show improvements, desired to get better, desire for strategic alignment. The summary of Non-Baldridge schools: NCA was cumbersome, poor MEAP scores, the rationale was not known.

The theme from the Baldridge and Non-Baldridge school is as follows: Principals in both the Baldridge and Non-Baldridge schools perceived that the previous processes were not providing improvement, therefore based upon the needs of the district, a process was sought which would be conducive to those needs. In the Baldridge school they sought a process for improved student achievement. The Non-Baldridge schools did not have a clearly articulated plan for improvement and seemed unclear as to the process they were utilizing.

Question #3: Were other models of school change examined prior to deciding on the school improvement process?

The summary of the Baldridge schools: Other NCA processes were reviewed, no other models were examined, and they searched for a process for strategic alignment. The summary of Non-Baldridge schools: They searched the web for a process, and no other models were examined.

The theme from the Baldridge and Non-Baldridge school is as follows: It was not apparent to the principals of Baldridge and Non-Baldridge schools, if another process had been considered. In most cases the decisions were being made within the ranks of central office and did not seek their input into finding a school change process.
Question #4: What are the elements of the school improvement process and has the school improvement process been adopted and implemented entirely in your district?

The summary of the Baldrige schools: All Baldrige categories were not fully implemented, school improvement process was fully implemented. The summary of Non-Baldrige schools: All were fully implemented.

The theme from the Baldrige and Non-Baldrige school is as follows: In the Baldrige schools the principals perceived that they were all working toward full implementation, and in one case the principal believed that all of the categories had been fully implemented. In the Non-Baldrige schools in which they were following a designed process, the principals believed that those school improvement processes had been fully implemented.

Question #5: How was the implementation of the school improvement process structured in the district?

The summary of the Baldrige schools: Administrators were trained first, volunteers to be trained were solicited. The summary of Non-Baldrige schools: Volunteers were solicited, central office administrators mandated, and building level made a decision regarding design.

The theme from the Baldrige and Non-Baldrige school is as follows: In the Baldrige schools there was a top down decision regarding the implementation in two of the schools. One of the schools allowed volunteers from the staff to participate. In the Non-Baldrige schools there was a choice given to participate or not to participate in two of the schools. The other school had a mandate for participation.

Question #6: How was the shared vision for using the school improvement process arrived at among the school stakeholders?
The summary of Baldrige schools: Superintendent took a stand, the school improvement process was evolved from previous work, and they utilized the vision of Pinellas County, Florida. The summary of Non-Baldrige schools: Information was shared at staff meetings, mission statements were developed, and there was a mandate.

The theme from the Baldrige and Non-Baldrige school is as follows: There were no common themes in this question. All of the schools used various approaches based upon the differing leadership styles.

Question 7: Do you believe there has been buy-in by the teachers and the community of the school improvement process?

The summary of Baldrige schools: Buy-in was an ongoing process; there was initial resistance as teachers became more involved there was more buy-in, and teacher’s activities indicated buy-in. The summary of Non-Baldrige schools: There is a belief that there is support, the data has promoted buy-in, and teachers learned to submit to NCA as a school improvement process.

The theme from the Baldrige and Non-Baldrige school is as follows: In the Baldrige schools, the more the teachers became involved the more they bought into the process. In the Non-Baldrige schools there was not a clear perception from the principals regarding buy-in.

Question 8: What has been the strategy for training teachers and the community for your school improvement implementation?

The summary of Baldrige schools: Strategies were weekly staff meetings, district inservices, PTO training, they utilized the Michigan Quality Council Award application and learned about the school to develop action plans, and trainers were used to train staff. The
summary of the Non-Baldrige schools: They believed that training was not necessary, and the curriculum teams determined the training.

The theme from the Baldrige and Non-Baldrige school is as follows: In the Baldrige schools there was an apparent need for on-going training. However, the Non-Baldrige schools in most cases were utilizing a process similar to what they had previously and did not find the need for training for their staff, except in specific cases.

Question #9: What have been the major barriers for school improvement process implementation?

The summary of the Baldrige schools: Major barriers have been change time, resources, time and communication; administrative changes caused inconsistency in leadership. The summary of Non-Baldrige schools: There was no structure to the process; change process; initial stages had resistance.

The theme from the Baldrige and Non-Baldrige school is as follows: Both Baldrige and Non-Baldrige school principal’s discussed the element of change and how it impacts the process. Specific barriers were relative to each school.

Question #10: What evidence is present that the school improvement process is working in the district?

The summary of Baldrige schools: There were improved MEAP scores, curriculum alignment, class size reduction, focus on the MEAP, at-risk strategies, change in staff; improved student performance, staff focus; staff morale improved; test scores improved, utilized benchmarking. The summary of Non-Baldrige schools: There was no evidence that the school improvement practice was working: student scores increased, teachers worked more collaboratively.
The theme from the Baldrige and Non-Baldrige school is as follows: Baldrige school principals were able to give specifics, with data support, to the evidence of change in their schools and district. The Non-Baldrige school principals did not indicate a clear understanding or data which provided evidence that the process was working.

Question #11: Does the district have data to support that demonstrates improvement in student achievement since implementing the school improvement process?

The summary of Baldrige schools: Data to support improvement included MEAP scores; improved student performance; and test scores. The summary of Non-Baldrige schools: Teachers collect the data; increase in student scores; NCA goals used to measure improvements.

The theme from the Baldrige and Non-Baldrige school is as follows: The Baldrige schools had an emphasis on student performance and considered assessments as a way to measure improvement. The Non-Baldrige schools did not have the same perception of data collection and its importance in the process.

Question #12: How have instructional practices been affected by implementing the School improvement process?

The summary of Baldrige schools: Instructional practices were affected by students being more involved in their education; the level of expectation for students is much higher; and strategies are embedded in their classrooms. The summary of the Non-Baldrige schools: Specific direction has been given to teachers; teacher meetings have changed (for example have book discussions); and teachers are focused on what students need to know.

The theme from the Baldrige and Non-Baldrige school is as follows: The principals of Baldrige schools perceived that the teachers have become more engaged into the
teaching/learning experiences for the students. Two of the Non-Baldridge schools had not yet made the connection of the school improvement process directly to the classroom. One of the Non-Baldridge schools discussed teachers being focused on what the students needed to know.

Question #13: Are there any thoughts that you would like to share to help me better understand the impact of the school improvement process in your district?

The summary of Baldridge schools: Data is an important part of the process. Funds are needed to assist in Baldridge reaching its fullest capacity; data is instrumental in helping people to understand the need for change; and quarterly assessments help teachers to know what they should teach. The summary of Non-Baldridge schools: There are challenges with the Peer Review Plan, in that it has not yet materialized; data is a powerful tool; and parent component is important.

The theme from the Baldridge and Non-Baldridge school is as follows: All of the Baldridge schools discussed the importance of data and assessments in this process. The Non-Baldridge schools also discussed the importance of data with the exception of one of the principals.

Summary of themes:

The driving force for a change in the school improvement process in most schools was the need to change based upon the assessment scores in the district. In all cases leadership precipitated the changes in the school improvement processes in the school districts. Though leadership styles were different, from mandates to shared leadership decisions, all had the initial processes initiated at the superintendent level. In most cases principals were unaware if other school improvement processes had been considered.
A clear distinction regarding training was made between Baldridge Schools and Non-Baldridge Schools. Training was necessary in the Baldridge schools but not necessary in the Non-Baldridge schools. The Non-Baldridge schools were using similar process as they had in the past, and thus did not designate training when the process changes from the previous process.

Barriers to the implementation process were varied in the schools. Most schools reported the change process as one of the barriers to implementation. Both Baldridge and Non-Baldridge schools discussed barriers specific to their schools, in one instance the principal did not see any barriers other than the initial resistance to the process. Baldridge school principals were very specific in responding to the questions regarding evidence that indicates that the school improvement process is working. Answers of the Non-Baldridge school principals were less specific. Baldridge principals were concerned about alignment and data, and the Non-Baldridge principals were concerned with the actual processes of school improvement. Baldridge schools were consistently focused on data that indicated change in student achievement and school environment.

Instructional practices have been impacted by the change in the school improvement processes in each of the schools. The changes discussed ranged from more teacher understanding and purposeful teaching, to changes that exist in the format of staff meetings. Overall, the principals' perceived that the school improvement process had changed the teaching and learning experiences.
Research Findings in Baldrige and Non-Baldrige Schools

School Systems Check Level III

Skipley and Associates developed the School Systems Check Level III. The School Systems Check Level III is based upon the Malcolm Baldrige Education Criteria for Performance Excellence.

Summary of School Systems Check Level III—School A.1

In school A.1 the principal's perceptions were that his school was proficient in most areas. Of the 18 areas school A.1 was advanced in two areas; proficient in seven of the areas; progressing in seven areas; and not yet in two areas. In the category of Leadership, this school was proficient in all three areas. In the category of School Strategic Planning this school is proficient in all two of the areas. In category Student Stakeholder and Market Focus, this school is proficient in one area, progressing in one area, and not yet in one area. In the category of Measurement, Analysis and Knowledge Management this school is progressing in both areas. In the category of Faculty and Staff Focus this school is proficient in one area, and progressing in three areas. The category of Process Management the principal perceives the school as progressing in all four of the areas. Finally, the category of Performance Results the school is reported as advanced in both of the areas.

The following Table 4 illustrates the data from the School Systems Check Level III for school A.1.
<table>
<thead>
<tr>
<th>1.0 LEADERSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 School develops a school mission statement and improvement goals</td>
</tr>
<tr>
<td>1.2 School reviews and monitors school performance and reports progress to all stakeholders</td>
</tr>
<tr>
<td>1.3 School uses quality improvement principles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.0 SCHOOL STRATEGIC PLANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 School goals are aligned to district goals and student/stakeholder needs</td>
</tr>
<tr>
<td>2.2 School works with staff and stakeholders to develop action plans to accomplish goals</td>
</tr>
<tr>
<td>3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS</td>
</tr>
<tr>
<td>3.1 School priorities are based on district goals, state performance standards and community requirements</td>
</tr>
<tr>
<td>3.2 School systematically builds positive relationships with stakeholders and the community</td>
</tr>
<tr>
<td>3.3 School monitors stakeholder satisfaction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.0 MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 School collects and uses data to improve performance and guide decisions</td>
</tr>
<tr>
<td>4.2 School collects data to compare school performance to similar and benchmark schools</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1(Yet)</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1(Not Yet)</td>
<td>2(Progressing)</td>
<td>3(Proficient)</td>
<td>4(Advanced)</td>
<td>5(Not Rated)</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>---------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.0 FACULTY AND STAFF FOCUS</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1 School recognizes and rewards staff and student contributions toward achieving school goals</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 School creates a team environment that promotes personal growth and high performance</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3 The school has systems to train and educate faculty and staff to achieve school goals and contribute to high performance</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4 The school monitors levels of faculty and staff well-being and satisfaction</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0 PROCESS MANAGEMENT</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDCA) to improve operational support processes</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDCA) to improve operational support processes</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.0 PERFORMANCE RESULTS</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1 School performance results are improving compared to past performance results</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2 School performance is improving as compared to similar schools</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary of School Systems Check Level III-School 1.2

The perception of principal A.2 is in the school is in the proficient area in most categories. Of the 18 areas the school was perceived advanced in five areas; proficient in nine areas; progressing in one area; not yet in one area; and two not rated.
In the category of Leadership the perception was the school is proficient in two of the areas and advanced in one area. In the School Strategic Planning category the school was ranked as advanced in one area and no rating given in the other. The third category of Student Stakeholder and Market Focus the school was perceived as proficient in all three areas. The Measurement, Analysis and Knowledge Management category was ranked one advanced and one proficient. The category of Faculty and Staff Focus indicated that the school is perceived to be advanced in one area, proficient in one area, not yet in one area and one area not rated. In the Process Management category the school was ranked as proficient in both areas. Lastly, the Performance Results category indicated that the school was proficient in both areas.

The following Table 5 illustrates the results of the survey from school A.2.

Table 5

School Systems Check Level III-School A.2

<p>| 1.0 LEADERSHIP | 1.1 School develops a school mission statement and improvement goals | X |
| 1.2 School reviews and monitors school performance and reports progress to all stakeholders | X |
| 1.3 School uses quality improvement principles | X |
| 2.0 SCHOOL STRATEGIC PLANNING | |
| 2.1 School goals are aligned to district goals and student /stakeholder needs | X |
| 2.2 School works with staff and stakeholders to develop action plans to accomplish goals | X |</p>
<table>
<thead>
<tr>
<th>Requirement</th>
<th>1 (Not Yes)</th>
<th>2 (Progressing)</th>
<th>3 (Proficient)</th>
<th>4 (Advanced)</th>
<th>5 (Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 School priorities are based on district goals, state performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 School systematically builds positive relationships with stakeholders</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and the community requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 School monitors stakeholder satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4.0 MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 School collects and uses data to improve performance and guide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 School collects data to compare school performance to similar and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>benchmark schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5.0 FACULTY AND STAFF FOCUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1 School recognizes and rewards staff and student contributions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>toward achieving school goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 School creates a target environment that promotes personal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>growth and high performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5.3 The school has systems to train and educate faculty and staff to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>achieve school goals and contribute to high performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5.4 The school monitors levels of faculty and staff well-being and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0 PROCESS MANAGEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 The school uses a continuous improvement approach (Plan-Do-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Study-Act or PDPA) to improve operational support processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>or PDPA) to improve operational support processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 7.0 PERFORMANCE RESULTS

<table>
<thead>
<tr>
<th>1(Not Yet)</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

7.2 School performance is improving as compared to similar schools

|            |               |               |             | X       |

---

**Summary of Comparisons of School Systems Check Level III-Schools A.1 and A.2**

The comparisons of School Systems Check Level III, school A.1 and A.2 are as follows: In the category of Leadership A.1 perceived the school as being proficient in all areas while school A.2 perceived the school as being proficient in two areas and advanced in one area.

In the category of School Strategic Planning school A.1 perceived the school as being proficient in both of the areas, school A.2 perceived the school as being advanced in one of the areas and did not rate themselves in the other.

In the category of Student Stakeholder, and Market Focus school A.1 perceived the school as being proficient in one of the areas; progressing in one area and not yet in one area. School A.2 perceived that they are proficient in two of the areas and advanced in the other.

The category of Measurement, Analysis and Knowledge Management indicated that school A.1 perceived that the school was progressing in two areas. School A.2 perceived that the school was advanced in one area and proficient in one area.

The category of Faculty and Staff Focus, school A.1 perceived that the school was proficient in one of the areas; progressing in two of the areas and not yet in one of the areas. School A.2 perceived to be advanced in one area; proficient in one area; not yet in one area; and one area not rated.
The category of Process Management indicated that school A.1 is progressing in both areas. School A.2 is proficient in both areas.

The category of Performance Results, school A.1 is advanced in both areas. School A.2 is proficient in both areas.

The following Table 6 illustrates the comparisons between schools A.1 and A.2.

Table 6
School Systems Check Level III-Comparison of A.1 and A.2

<table>
<thead>
<tr>
<th>Area</th>
<th>A.1</th>
<th>A.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 LEADERSHIP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 School develops a school mission statement and improvement goals</td>
<td>A.1</td>
<td>A.2</td>
</tr>
<tr>
<td>1.2 School reviews and monitors school performance and reports progress to all stakeholders</td>
<td>A.1</td>
<td>A.2</td>
</tr>
<tr>
<td>1.3 School uses quality improvement principles</td>
<td>A.1</td>
<td>A.2</td>
</tr>
<tr>
<td>2.0 SCHOOL STRATEGIC PLANNING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 School goals are aligned to district goals and student stakeholder needs</td>
<td>A.1</td>
<td>A.2</td>
</tr>
<tr>
<td>2.2 School works with staff and stakeholders to develop action plans to accomplish goals</td>
<td>A.1</td>
<td>A.2</td>
</tr>
<tr>
<td>3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 School priorities are based on district goals, state performance standards and community requirements</td>
<td>A.1</td>
<td>A.2</td>
</tr>
<tr>
<td>3.2 School systematically builds positive relationships with stakeholders and the community</td>
<td>A.1</td>
<td>A.2</td>
</tr>
<tr>
<td>3.3 School monitors stakeholder satisfaction</td>
<td>A.1</td>
<td>A.2</td>
</tr>
</tbody>
</table>
4.0 MEASUREMENT, ANALYSIS AND KNOWLEDGE MANAGEMENT
4.1 School collects and uses data to improve performance and guide decisions
4.2 School collects data to compare school performance to similar and benchmark schools

5.0 FACULTY AND STAFF FOCUS
5.1 School recognizes and rewards staff and student contributions toward achieving school goals
5.2 School creates a team environment that promotes personal growth and high performance
5.3 The school has systems to train and educate faculty and staff to achieve school goals and contribute to high performance
5.4 The school monitors levels of faculty and staff well-being and satisfaction

6.0 PROCESS MANAGEMENT
6.1 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes
6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes

7.0 PERFORMANCE RESULTS
7.1 School performance results are improving compared to past performance results
7.2 School performance is improving as compared to similar schools
Summary of School Systems Check Level III-School B.1

In school B.1 the principal's perceptions were that his school was proficient in most areas. Of the 18 areas school A.1 was advanced in four areas; and proficient in 14 of the areas. In the category of Leadership, this school was advanced in two of the areas, and proficient in one of the areas. In the category of School Strategic Planning this school is advanced in one of the two areas, and proficient in one of the areas. In category Student Stakeholder and Market Focus, this school is advanced in one area; proficient in two areas. In the category of Measurement, Analysis and Knowledge Management this school is advanced in one area, and proficient in three areas. In the category of Faculty and Staff Focus this school is advanced in one area and proficient in three areas. The category of Process Management the principal perceives the school as proficient in both areas. Finally, the category of Performance Results the school is reported as proficient in both of the areas.

The following Table 7 illustrates the data from the School Systems Check Level III for school B.1.

<table>
<thead>
<tr>
<th>School Systems Check Level III-School B.1</th>
<th>1 (Not Yet)</th>
<th>2 (Progressing)</th>
<th>3 (Proficient)</th>
<th>4 (Advanced)</th>
<th>5 (Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0 LEADERSHIP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 School develops a school mission statement and improvement goals</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.2 School reviews and monitors school performance and reports progress to all stakeholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 School uses quality improvement principles</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
2.0 SCHOOL STRATEGIC PLANNING

2.1 School goals are aligned to district goals and student/stakeholder needs

2.2 School works with staff and stakeholders to develop action plans to accomplish goals

3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS

3.1 School priorities are based on district goals, state performance standards and community requirements

3.2 School systematically builds positive relationships with stakeholders and the community

3.3 School monitors stakeholder satisfaction

4.0 MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT

4.1 School collects and uses data to improve performance and guide decisions

4.2 School collects data to compare school performance to similar and benchmark schools

5.0 FACULTY AND STAFF FOCUS

5.1 School recognizes and rewards staff and student contributions toward achieving school goals

5.2 School creates a team environment that promotes personal growth and high performance

5.3 The school has systems to train and educate faculty and staff to achieve school goals and contribute to high performance

5.4 The school monitors levels of faculty and staff well-being and satisfaction
### 6.0 PROCESS MANAGEMENT

<table>
<thead>
<tr>
<th>1(Not Yet)</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.1 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes

6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes

### 7.0 PERFORMANCE RESULTS

7.1 School performance results are improving compared to past performance results

7.2 School performance is improving as compared to similar schools

---

**Summary of School Systems Check Level III: School B.2**

School A-2 principals' perception is that the school is proficient in most of the areas of the seven categories. Of the 18 areas the school was perceived advanced in one area; proficient in 14 areas; progressing in three areas.

In the category of Leadership the perception was that the school is proficient in all of the areas. In the School Strategic Planning category the school was ranked as advanced in one area and progressing in the other. The third category of Student Stakeholder and Market Focus the school was perceived proficient in all three areas. The Measurement, Analysis and Knowledge Management category Baldridge-based Criteria the school is proficient in one area, and progressing in one area. In the category of Faculty and Staff Focus the school is proficient in three areas and progressing in one area. The category of Process Management
the principal perceives the school as proficient in both areas. Finally, the category of
Performance Results the school is reported as proficient in both of the areas.

The following Table 8 illustrates the data from the School System Check Level III for
school B.2.

Table 8
School Systems Check Level III-School B.2

<table>
<thead>
<tr>
<th>1.0 LEADERSHIP</th>
<th>1(Not Yet)</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 School develops a school mission statement and improvement goals</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 School reviews and monitors school performance and reports progress to all stakeholders</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 School uses quality improvement principles</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.0 SCHOOL STRATEGIC PLANNING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 School goals are aligned to district goals and student/stakeholder needs</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 School works with staff and stakeholders to develop action plans to accomplish goals</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 School priorities are based on district goals, state performance standards and community requirements</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 School systematically builds positive relationships with stakeholders and the community</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 School monitors stakeholder satisfaction</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.0 MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT

4.1 School collects and uses data to improve performance and guide decisions

4.2 School collects data to compare school performance to similar and benchmark schools

5.0 FACULTY AND STAFF FOCUS

5.1 School recognizes and rewards staff and student contributions toward achieving school goals

5.2 School creates a team environment that promotes personal growth and high performance

5.3 The school has systems to train and educate faculty and staff to achieve school goals and contribute to high performance

5.4 The school monitors levels of faculty and staff well-being and satisfaction

6.0 PROCESS MANAGEMENT

6.1 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes

6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes

7.0 PERFORMANCE RESULTS

7.1 School performance results are improving compared to past performance results

7.2 School performance is improving as compared to similar schools
Summary of Comparisons of School Systems Check Level III-Schools B.1 and B.2

The comparisons of School Systems Check Level III, school B.1 and B.2 are as follows: In the category of Leadership B.1 perceived the school as being proficient in two areas and advanced in one area. School A.2 perceived the school as being advanced in all three areas.

In the category of School Strategic Planning school B.1 perceived the school as being proficient in one area and advanced in one area. School B.2 perceived the school as being advanced in both of the areas.

In the category of Student Stakeholder, and Market Focus school B.1 perceived the school as being proficient in two of the areas; and advanced in one area. School B.2 perceived that they are advanced in all areas.

The category of Measurement, Analysis and Knowledge Management indicated that school B.1 perceived that the school was proficient in two areas. School B.2 perceived that the school was advanced in both areas.

The category of Faculty and Staff Focus, school B.1 perceived the school was proficient in two of the areas and advanced in one area. School B.2 perceived the school to be advanced in all areas.

The category of Process Management indicated that school B.1 is proficient in both areas. School B.2 is advanced in both areas.

The category of Performance Results, school B.1 is proficient in both areas. School B.2 is advanced in both areas.

The following Table 9 indicates the comparisons between schools B.1 and B.2.
<table>
<thead>
<tr>
<th>1.0 LEADERSHIP</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 School develops a school mission statement and improvement goals</td>
<td></td>
<td></td>
<td>B.1, B.2</td>
<td></td>
</tr>
<tr>
<td>1.2 School reviews and monitors school performance and reports progress to all stakeholders</td>
<td></td>
<td>B.1</td>
<td>B.2</td>
<td></td>
</tr>
<tr>
<td>1.3 School uses quality improvement principles</td>
<td></td>
<td>B.1</td>
<td>B.2</td>
<td></td>
</tr>
<tr>
<td>2.0 SCHOOL STRATEGIC PLANNING</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 School goals are aligned to district goals and student/stakeholder needs</td>
<td></td>
<td></td>
<td>B.1, B.2</td>
<td></td>
</tr>
<tr>
<td>2.2 School works with staff and stakeholders to develop action plans to accomplish goals</td>
<td></td>
<td>B.1</td>
<td>B.2</td>
<td></td>
</tr>
<tr>
<td>3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 School priorities are based on district goals, state performance standards and community requirements</td>
<td></td>
<td></td>
<td>B.1, B.2</td>
<td></td>
</tr>
<tr>
<td>3.2 School systematically builds positive relationships with stakeholders and the community</td>
<td></td>
<td>B.1</td>
<td>B.2</td>
<td></td>
</tr>
<tr>
<td>3.3 School monitors stakeholder satisfaction</td>
<td></td>
<td>B.1</td>
<td>B.2</td>
<td></td>
</tr>
<tr>
<td>4.0 MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 School collects and uses data to improve performance and guide decisions</td>
<td></td>
<td>B.1</td>
<td>B.2</td>
<td></td>
</tr>
<tr>
<td>4.2 School collects data to compare school performance to similar and benchmark schools</td>
<td></td>
<td>B.1</td>
<td>B.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 (Not Yet)</td>
<td>2 (Progressing)</td>
<td>3 (Proficient)</td>
<td>4 (Exceeding)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>5.0 FACULTY AND STAFF FOCUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1 School recognizes and rewards staff and student contributions toward achieving school goals</td>
<td>B.1</td>
<td>B.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 School creates a team environment that promotes personal growth and high performance</td>
<td>B.1</td>
<td>B.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3 The school has systems to train, and educate faculty and staff to achieve school goals and contribute to high performance</td>
<td></td>
<td></td>
<td>B.1, B.2</td>
<td></td>
</tr>
<tr>
<td>5.4 The school monitors levels of faculty and staff well-being and satisfaction</td>
<td>B.1</td>
<td>B.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0 PROCESS MANAGEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes</td>
<td>B.1</td>
<td>B.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes</td>
<td>B.1</td>
<td>B.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.0 PERFORMANCE RESULTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1 School performance results are improving compared to past performance results</td>
<td>B.1</td>
<td>B.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2 School performance is improving as compared to similar schools</td>
<td>B.1</td>
<td>B.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Summary of School Systems Check Level III-School C.1*

In school C.1 the principal’s perceptions were that this school was progressing in most areas. Of the 18 areas, school C.1 was proficient in 6 of the areas and progressing in twelve of the areas. In the category of Leadership, this school was proficient in all of the areas. In the category of School Strategic Planning this school is progressing in both areas. In category Student Stakeholder and Market Focus, this school is progressing in all areas.
the category of Measurement, Analysis and Knowledge Management this school is proficient in one area and progressing in one area. In the category of Faculty and Staff Focus this school is proficient in two areas and progressing in two areas. The category of Process Management the principal perceives the school as progressing in both areas. Finally, the category of Performance Results the school is reported as progressing in both of the areas.

The following Table 10 illustrates the data from the School System Check Level III for school C.1.

Table 10

School Systems Check Level III-School C.1

<table>
<thead>
<tr>
<th>1.0 LEADERSHIP</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mission statement and improvement goals</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>1.2 School reviews and monitors</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>school performance and reports progress to all stakeholders</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>1.3 School uses quality improvement principles</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2.0 SCHOOL STRATEGIC PLANNING</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 School goals are aligned to district goals and student/stakeholder needs</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2.2 School works with staff and stakeholders to develop action plans to accomplish goals</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 School priorities are based on district goals, state performance standards and community requirements</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.2 School systematically builds positive relationships with stakeholders and the community</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>1(Not Yes)</td>
<td>2(Progress ing)</td>
<td>3(Profici ency)</td>
<td>4(Advanced)</td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
<td>----------------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>3.3 School monitors stakeholder satisfaction</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.0 MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 School collects and uses data to improve performance and guide decisions</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 School collects data to compare school performance to similar and benchmark schools</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.0 FACULTY AND STAFF FOCUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1 School recognizes and rewards staff and student contributions toward achieving school goals</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 School creates a team environment that promotes personal growth and high performance</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5.3 The school has systems to train and educate faculty and staff to achieve school goals and contribute to high performance</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5.4 The school monitors levels of faculty and staff well-being and satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0 PROCESS MANAGEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7.0 PERFORMANCE RESULTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1 School performance results are improving compared to past performance results</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7.2 School performance is improving as compared to similar schools</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Summary of School Systems Check Level III-School C.2

In school C.2 the principal's perceptions were that this school was advanced in most areas. Of the 18 areas, school C.1 was proficient in three of the areas and progressing in one of the areas. In the category of Leadership, this school was advanced in one of the areas and proficient in two of the areas. In the category of School Strategic Planning this school is advanced in all areas. In category Student Stakeholder and Market Focus, this school is advanced in two areas and proficient in one area. In the category of Measurement, Analysis and Knowledge Management this school is advanced in all areas. In the category of Faculty and Staff Focus this school is advanced in three areas and progressing in one area. The category of Process Management the principal perceives the school as advanced in both areas. Finally, the category of Performance Results the school is reported as advanced in both of the areas.

The following Table 11 illustrates the data from the School System Check Level III for school C.2.

Table 11:

<table>
<thead>
<tr>
<th>School Systems Check Level III-School C.2</th>
<th>1(Not Yet)</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 LEADERSHIP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 School develops a school mission statement and improvement goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>1.2 School reviews and monitors school performance and reports progress to all stakeholders</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 School uses quality improvement principles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2.0 SCHOOL STRATEGIC PLANNING</td>
<td>1(Not Yet)</td>
<td>2(Progressing)</td>
<td>3(Proficient)</td>
<td>4(Advanced)</td>
<td>5(Not Rated)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------</td>
<td>----------------</td>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>2.1 School goals are aligned to district goals and student needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2.2 School works with staff and stakeholders to develop action plans to accomplish goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 School priorities are based on district goals, state performance standards, and community requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.2 School systematically builds positive relationships with stakeholders and the community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3.3 School monitors stakeholder satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4.0 MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 School collects and uses data to improve performance and guide decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4.2 School collects data to compare school performance to similar and benchmark schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5.0 FACULTY AND STAFF FOCUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1 School recognizes and rewards staff and student contributions toward achieving school goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5.2 School creates a team environment that promotes personal growth and high performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5.3 The school has systems to train and educate faculty and staff to achieve school goals and contribute to high performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5.4 The school monitors levels of faculty and staff well-being and satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
### 6.0 PROCESS MANAGEMENT

<table>
<thead>
<tr>
<th></th>
<th>1(Not Yet)</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.0 PERFORMANCE RESULTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1 School performance results are improving compared to past performance results</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2 School performance is improving as compared to similar schools</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Summary of Comparisons of School Systems Check Level III-Schools C.1 and C.2

The comparisons of School Systems Check Level III, school B.1 and B.2 are as follows: In the category of Leadership C.1 perceived the school as being proficient in all three areas. School B.2 perceived the school as being proficient in two areas and advanced in one area.

In the category of School Strategic Planning school C.1 perceived the school as being progressing in both areas. School C.2 perceived the school as being advanced in both of the areas.

In the category of Student Stakeholder and Market Focus school C.1 perceived the school as progressing in three of the areas. School C.2 perceived that they are progressing in one area and advanced in two of the areas.
The category of Measurement, Analysis and Knowledge Management indicated that school C.1 perceived that the school was progressing in one area and proficient in one area. School C.2 perceived that the school was advanced in both areas.

The category of Faculty and Staff Focus, school C.1 perceived the school was progressing in two of the areas, and proficient in two of the areas. School C.2 perceived the school to be progressing in one area and advanced in three areas.

The category of Process Management indicated that school C.1 is progressing in two of the areas. School C.2 is advanced in both areas.

The category of Performance Results, school C.1 is progressing in both areas. School C.2 is advanced in both areas.

The following Table 12 illustrates the comparative data from the School System Check Level III for schools C.1 and C.2.

Table 12

<table>
<thead>
<tr>
<th>School Systems Check Level III-Comparison of C.1 and C.2</th>
<th>1(Not Yet)</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 LEADERSHIP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 School develops a school mission statement and improvement goals</td>
<td>C.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 School reviews and monitors school performance and reports progress to all stakeholders</td>
<td>C.1, C.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 School uses quality improvement principles</td>
<td>C.1, C.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.0 SCHOOL STRATEGIC PLANNING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 School goals are aligned to district goals and student/stakeholder needs</td>
<td>C.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1 (Not Yet)</th>
<th>2 (Proficient)</th>
<th>3 (Progressing)</th>
<th>4 (Advanced)</th>
<th>5 (Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2 School works with staff and stakeholders to develop action plans to accomplish goals</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 School priorities are based on district goals, state performance standards and community requirements</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 School systematically builds positive relationships with stakeholders and the community</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 School monitors stakeholder satisfaction</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.0 MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 School collects and uses data to improve performance and guide decisions</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 School collects data to compare school performance to similar and benchmark schools</td>
<td>C.1</td>
<td>C.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.0 FACULTY AND STAFF FOCUS</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1 School recognizes and rewards staff and student contributions toward achieving school goals</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 School creates a team environment that promotes personal growth and high performance</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3 The school has systems to train and educate faculty and staff to achieve school goals and contribute to high performance</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4 The school monitors levels of faculty and staff well-being and satisfaction</td>
<td>C.1, C.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0 PROCESS MANAGEMENT</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes</td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes

7.0 PERFORMANCE RESULTS
7.1 School performance results are improving compared to past performance results
7.2 School performance is improving as compared to similar schools

<table>
<thead>
<tr>
<th>(Not Yet)</th>
<th>2 (Progressing)</th>
<th>3 (Proficient)</th>
<th>4 (Advanced)</th>
<th>5 (Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C.1</td>
<td>C.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary of Findings of School Systems Check Level III

Schools A.1, A.2, B.1, B.2, C.1, and C.2

The first category Leadership is described as leadership being responsible for setting direction and monitoring progress of school processes. In this category the Baldrige and Non-Baldrige principals perceived that they are proficient and advanced in this category. Most perceived their schools as proficient.

More specifically in category Leadership, area 1.1: school develops a school mission statement and improvement goals, two of the Baldrige Schools were proficient and one was advanced. In the Non-Baldrige School one was proficient and two were advanced. In area 1.2, school reviews and monitors school performance and reports progress to all stakeholders, the Baldrige schools all selected proficient; and in the Non-Baldrige schools two selected proficient and one selected advanced. In area 1.3, school uses quality improvement principles, of the three Baldrige schools all selected proficient; in the Non-Baldrige schools one selected proficient and two schools selected advanced.
In the second category of School Strategic Planning, the school plan supports the
district plan and the plan takes into account the student and stakeholder needs. The goals and
measures of the plan focus on student achievement. In this category principals ranged from
progressing to advance. In most cases, the principal perceived that they were advanced or
proficient in this area.

Further details in the category of School Strategic Planning area 2.1: school goals are
aligned to district goals and student/stakeholder needs, of the Baldridge principals' one
selected progressing, one proficient and one advanced. In the Non-Baldridge schools all three
schools indicated that they were advanced.

The third category of Student Stakeholder and Market Focus is a category to build
relationships with students, parents, other schools and the community and to assess the needs
of the stakeholders. The range of perceptions of principals is from not yet too advanced.
Most principals perceived that they were proficient in this area.

The details of Student Stakeholder and Market Focus, area 3.1: school priorities are
based on district goals and state performance standards and community requirements show
that two of the Baldridge principals selected progressing and one selected advanced. In the
Non-Baldridge schools one school was proficient and two schools were advanced. The area
3.2: school systematically builds positive relationships with stakeholders and the community,
two of the Baldridge principals perceived that their schools were proficient and one principal
perceived that the school was progressing. The Non-Baldridge school principals indicated that
all three were advanced. The areas 3.3: School Monitors Stakeholder Satisfaction, the
Baldridge schools selections all differed. One Baldridge school selected not yet, the other
progressing and the last proficient. In the Non-Baldrige Schools two schools selected proficient and one school selected advanced.

In the fourth category, Measurement, Analysis and Knowledge Management, the school collects and manages information required to monitor school progress. In this category principals perceived their schools ranging from progressing to advanced. The proficient category was selected most frequently.

In the category of Measurement, Analysis and Knowledge Management, area 4.1: school collects and uses data to improve performance and guide decisions, two Baldrige schools selected progressing and one selected proficient. In the Non-Baldrige schools all three of the schools were advanced. In area 4.2: school collects data to compare school performance to similar and benchmark schools, one of the Baldrige schools selected progressing and the other two selected proficient. In the Non-Baldrige schools one school selected proficient and the other two selected advanced.

The fifth category of Faculty and Staff Focus assess the engagement of the staff, faculty and students into the development of the school. The categories selected by the principals ranged from not yet to advance. Most principals selected the area of proficient and advanced.

In category 5.0 Faculty and Staff Focus area 5.1: school recognizes and rewards staff and student contributions toward achieving school goals, the Baldrige schools selected one not yet, one proficient and one progressing. The Non-Baldrige schools two indicated advanced and one no response given. In the area 5.2: school creates a team environment that promotes personal growth and high performance, all Baldrige schools indicated proficient. The Non-Baldrige schools indicated one progressing, and two selected advanced. The area
5.3: the school has systems to train and educate faculty and staff to achieve school goals and contribute to high performance, the Baldrige schools indicated one progressing, one proficient and one advanced. The three Non-Baldrige schools selected advanced. In the area of 5.4: the school monitors levels of faculty and staff well being and satisfaction, two of the Baldrige schools selected progressing and one school selected proficient. The Non-Baldrige school one selected not yet, one selected progressing and one selected advanced.

The sixth category, Process Management, involves the faculty, staff and students which improve processes that are designated to achieve classroom goals. The selected areas ranged from progressing to advance. Most selected progressing and proficient.

The details of the sixth category of Process Managements, area 6.1: the school uses a continuous improvement approach (Plan-Do-Study Act or PDSA) is used to improve educational programs, offerings, and student services, the Baldrige schools had two schools selected that they were progressing and one school selected proficient. One of the Non-Baldrige schools selected proficient and two selected advanced. In area 6.2: the school uses a continuous improvement approach (Plan-Do-Study Act or PDSA) to improve operational support processes; two of the Baldrige schools selected progressing and one school selected proficient. One of the Non-Baldrige schools selected proficient and two schools selected advanced.

The seventh category, Performance Results, evaluates if the school is able to show continuous improvement in all areas of the school. In the Performance Results areas, principals' selections ranged from progressing to advance. Advanced and proficient were selected most frequently.
The final category, Performance Results, area 7.1: school performance results are improving compared to past performance results, one of the Baldrige schools selected progressing, one selected proficient and one selected advanced. The Non-Baldrige schools one selected proficient and two principal’s selected advanced. The area 7.2: school performance is improving as compared to similar schools; the Baldrige schools indicate one progressing, one proficient and one advanced. In the Non-Baldrige schools one selected proficient and two selected advanced.

The following Table 13 is the data of the School Systems Check Level III.

Table 13

<table>
<thead>
<tr>
<th>School Systems Check Level III—Comparison Baldrige and Non-Baldrige</th>
<th>1(Not Yet)</th>
<th>2(Progress ing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 LEADERSHIP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 School develops a school mission statement and improvement goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baldrige</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Baldrige</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 School reviews and monitors school performance and reports progress to all stakeholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baldrige</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Baldrige</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 School uses quality improvement principles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baldrige</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Baldrige</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.0 SCHOOL STRATEGIC PLANNING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 School goals are aligned to district goals and student /stakeholder needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baldrige</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Baldrige</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
2.2 School works with staff and stakeholders to develop action plans to accomplish goals

<table>
<thead>
<tr>
<th></th>
<th>1(Not Yet)</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Not Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldridge</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Baldridge</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

3.0 STUDENT, STAKEHOLDER, AND MARKET FOCUS

3.1 School priorities are based on district goals, state performance standards and community requirements

<table>
<thead>
<tr>
<th></th>
<th>Baldridge</th>
<th>Non-Baldridge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

3.2 School systematically builds positive relationships with stakeholders and the community

<table>
<thead>
<tr>
<th></th>
<th>Baldridge</th>
<th>Non-Baldridge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

3.3 School monitors stakeholder satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Baldridge</th>
<th>Non-Baldridge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

4.0 MEASUREMENT, ANALYSIS, AND KNOWLEDGE MANAGEMENT

4.1 School collects and uses data to improve performance and guide decisions

<table>
<thead>
<tr>
<th></th>
<th>Baldridge</th>
<th>Non-Baldridge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

4.2 School collects data to compare school performance to similar and benchmark schools

<table>
<thead>
<tr>
<th></th>
<th>Baldridge</th>
<th>Non-Baldridge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

5.0 FACULTY AND STAFF FOCUS

5.1 School recognizes and rewards staff and student contributions toward achieving school goals

<table>
<thead>
<tr>
<th></th>
<th>Baldridge</th>
<th>Non-Baldridge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1(Not Yet)</td>
<td>2(Progressing)</td>
<td>3(Proficient)</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
</tbody>
</table>
| 5.2 School creates a team environment that promotes personal growth and high performance  
Baldrige | 3 | | | |
| Non-Baldrige | 1 | 1 | 1 | |
| 5.3 The school has systems to train and educate faculty and staff to achieve school goals and contribute to high performance  
Baldrige | 1 | 1 | 1 | |
| Non-Baldrige | 1 | 2 | 1 | |
| 5.4 The school moniters levels of faculty and staff well-being and satisfaction  
Baldrige | 2 | | | |
| Non-Baldrige | 2 | | | |
| 6.0 PROCESS MANAGEMENT  
6.1 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes  
Baldrige | 2 | | | |
| Non-Baldrige | 2 | | | |
| 6.2 The school uses a continuous improvement approach (Plan-Do-Study-Act or PDSA) to improve operational support processes  
Baldrige | 2 | | | |
| Non-Baldrige | 2 | | | |
| 7.0 PERFORMANCE RESULTS  
7.1 School performance results are improving compared to past performance results  
Baldrige | 1 | 1 | | |
| Non-Baldrige | 1 | 2 | 1 | |
| 7.2 School performance is improving as compared to similar schools  
Baldrige | 1 | 1 | | |
| Non-Baldrige | 1 | 2 | | |
Summary of Results of School Systems Check Level III

This data indicates Non-Baldrige school principals perceive their school improvement practices as being higher in the proficient and advanced categories as compared to the Baldrige schools. The Baldrige schools ranked more heavily in the progressing and proficient categories.

The following Table 14 illustrates the rankings of the Baldrige and Non-Baldrige schools principal perceptions of their school practices.

Table 14

<table>
<thead>
<tr>
<th>School Systems Check Level III Comparison of Baldrige and Non-Baldrige School Total</th>
<th>1(Not Yet)</th>
<th>2(Progressing)</th>
<th>3(Proficient)</th>
<th>4(Advanced)</th>
<th>5(Rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldrige</td>
<td>2</td>
<td>19</td>
<td>26</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Non-Baldrige</td>
<td>1</td>
<td>3</td>
<td>27</td>
<td>18</td>
<td>2</td>
</tr>
</tbody>
</table>

Research Findings in Baldrige and Non-Baldrige Schools

Independent Sample t Test of MEAP Scores

The independent sample t test compares the means of two samples. The two groups being compared, Baldrige and Non-Baldrige schools are independent of each other. The independent sample t test requires two variables. One variable represents the value of the independent variable and the second variable is the dependent variable.

The mean scores of Baldrige and Non-Baldrige schools are compared. The mean scores of MEAP assessments, in the areas of math, reading, social studies and science, were compared.
Math-MEAP

All schools show an improvement in their MEAP math test scores during the three- year period. The following Table 15 indicates the actual Math MEAP scores.

Table 15

<table>
<thead>
<tr>
<th>MEAP-Math Scores Baldridge and Non-Baldridge Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
</tr>
<tr>
<td>Baldridge</td>
</tr>
<tr>
<td>A.1</td>
</tr>
<tr>
<td>B.1</td>
</tr>
<tr>
<td>C.1</td>
</tr>
<tr>
<td>Non-Baldridge</td>
</tr>
<tr>
<td>A.2</td>
</tr>
<tr>
<td>B.2</td>
</tr>
<tr>
<td>C.2</td>
</tr>
</tbody>
</table>

An independent samples t test was calculated comparing the mean score of math MEAP scores for Baldridge and Non-Baldridge Schools. No significant difference was found (t(16)=-.311, p>.05). The mean of the Non-Baldridge School (m=69.6556, sd=13.36508) was not significantly different from the mean of the Baldridge schools (m=67.8000, sd=11.89243).

The following Output Table 16 shows the Independent Sample t Test for Math.
Table 16

Independent Sample T-Test for Math

<table>
<thead>
<tr>
<th>Schools</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldridge</td>
<td>9</td>
<td>67.8000</td>
<td>11.89243</td>
<td>3.96414</td>
</tr>
<tr>
<td>Non-Baldridge</td>
<td>9</td>
<td>69.6556</td>
<td>13.36508</td>
<td>4.4503</td>
</tr>
</tbody>
</table>

Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variance assumed</td>
<td>.017</td>
<td>.899</td>
<td>.760</td>
<td>-1.8556</td>
<td>5.96336</td>
<td>-14.49732</td>
</tr>
<tr>
<td>Equal variance not assumed</td>
<td>-.311</td>
<td>15.787</td>
<td>.760</td>
<td>-1.8556</td>
<td>5.96336</td>
<td>-14/51121</td>
</tr>
</tbody>
</table>

Reading-MEAP

Baldridge and Non-Baldridge Reading scores were compared. School B.2 was the only school to show an increase in the actual reading scores over the three year period, while all others show a decrease in the reading scores. School A.1 shows an increase over 2002, but has a decrease in scores when comparing 2004 and 2003.

The following Table 17 shows the actual reading scores of Baldridge and Non-Baldridge schools.
An independent samples t test was calculated comparing the mean score of reading MEAP scores for Baldridge and Non-Baldridge Schools. No significant difference was found ($t(16)=-.114, p>.05$). The mean of the Non-Baldridge School ($m=79.6889$, $sd=6.56000$) was not significantly different from the mean of the Baldridge schools ($m=78.6556$, $sd=9.35630$).

The following is the Table 18 for the Independent Sample t Test for Reading.
Table 18

Independent Sample T-Test for Reading

<table>
<thead>
<tr>
<th>Schools</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldridge</td>
<td>9</td>
<td>78.6556</td>
<td>9.35639</td>
<td>3.11877</td>
</tr>
<tr>
<td>Non-Baldridge</td>
<td>9</td>
<td>79.0998</td>
<td>6.56090</td>
<td>2.18667</td>
</tr>
</tbody>
</table>

Independent Samples Test

Levene's Test for Equality of Variances

<table>
<thead>
<tr>
<th>MEAP-Reading</th>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>assumed</td>
<td>1.876</td>
<td>.190</td>
<td>-.114</td>
<td>16</td>
<td>.911</td>
<td>.4333</td>
<td>3.80896</td>
<td>-8.50798</td>
<td>7.64131</td>
</tr>
<tr>
<td>Equal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.114</td>
<td>14.335</td>
<td>.911</td>
<td>.4333</td>
<td>3.80896</td>
</tr>
</tbody>
</table>

Science-MEAP

Baldridge and Non-Baldridge Science scores were compared. All schools, with an exception of B.1 and C.1, have shown an increase in their actual test scores during the three-year period.

The following Table 19 shows the actual Science scores of Baldridge and Non-Baldridge schools.
Table 19

<table>
<thead>
<tr>
<th>MEAP-Science Scores Baldridge and Non-Baldridge Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Science</strong></td>
</tr>
<tr>
<td>Baldridge</td>
</tr>
<tr>
<td>A.1</td>
</tr>
<tr>
<td>B.1</td>
</tr>
<tr>
<td>C.1</td>
</tr>
<tr>
<td>Non-Baldridge</td>
</tr>
<tr>
<td>A.2</td>
</tr>
<tr>
<td>B.2</td>
</tr>
<tr>
<td>C.2</td>
</tr>
</tbody>
</table>

An independent samples t test was calculated comparing the mean score of science MEAP scores for Baldridge and Non-Baldridge Schools. No significant difference was found (t(16)=-.791, p>.05). The mean of the Non-Baldridge School (m=77.0444, sd=9.46548) was not significantly different from the mean of the Baldridge schools (m=73.5333, sd=9.37590). There is no statistical significance between the Baldridge and Non-Baldridge Science scores.

The following Output Table 20 shows the Independent Sample t Test for Science MEAP.
### Table 20

**Independent Sample T-Test for Science**

<table>
<thead>
<tr>
<th>Schools</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldridge</td>
<td>9</td>
<td>73.5333</td>
<td>5.37590</td>
<td>3.12530</td>
</tr>
<tr>
<td>Non-Baldridge</td>
<td>9</td>
<td>77.0444</td>
<td>9.46548</td>
<td>3.15516</td>
</tr>
</tbody>
</table>

**Independent Samples Test**

Leverne's Test for Equality of Variances

<table>
<thead>
<tr>
<th>MEAP-Science</th>
<th>F</th>
<th>Sig. t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variance not assumed</td>
<td>-.791</td>
<td>15.999</td>
<td>.441</td>
<td>-3.5111</td>
<td>4.4101</td>
<td>-12.92569</td>
<td>5.90347</td>
<td></td>
</tr>
</tbody>
</table>

**Social Studies-MEAP**

Baldridge and Non-Baldridge Social Studies scores were compared. All schools have shown an increase in their actual test scores during the three-year period. The Non-Baldridge schools show the higher scores for Social Studies.

The following Table 21 shows the actual Social Studies scores of Baldridge and Non-Baldridge schools.
<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baldrige</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.1</td>
<td>8.2</td>
<td>33.3</td>
<td>30.9</td>
</tr>
<tr>
<td>B.1</td>
<td>4.1</td>
<td>8.2</td>
<td>19.1</td>
</tr>
<tr>
<td>C.1</td>
<td>11.1</td>
<td>16.2</td>
<td>16.5</td>
</tr>
<tr>
<td><strong>Social Studies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-Baldrige</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.2</td>
<td>22.2</td>
<td>30.2</td>
<td>36.9</td>
</tr>
<tr>
<td>B.2</td>
<td>5.9</td>
<td>27.1</td>
<td>36.7</td>
</tr>
<tr>
<td>C.2</td>
<td>13.6</td>
<td>25.7</td>
<td>43</td>
</tr>
</tbody>
</table>

An independent samples t test was calculated comparing the mean score of social studies MEAP scores for Baldrige and Non-Baldrige Schools. No significant difference was found ($t(16) = 1.930, p = .05$). The mean of the Non-Baldrige School ($m = 26.1444, sd = 3.75102$) was not significantly different from the mean of the Baldrige schools ($m = 10.1060, sd = 3.36869$).

The following Output Table 22 shows the Independent Sample t Test for Social Studies.
Table 22:

Independent Sample T-Test

<table>
<thead>
<tr>
<th>Schools</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldrige</td>
<td>9</td>
<td>16.4000</td>
<td>10.10606</td>
<td>3.36869</td>
</tr>
<tr>
<td>Non-Baldrige</td>
<td>9</td>
<td>26.1444</td>
<td>11.28307</td>
<td>3.76102</td>
</tr>
</tbody>
</table>

Independent Samples Test

Levere's Test for Equality of Variance

<table>
<thead>
<tr>
<th>MEAP-Social Studies</th>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variance assumed</td>
<td>.045</td>
<td>.835</td>
<td>-1.930</td>
<td>16</td>
<td>.072</td>
<td>-9.7444</td>
<td>5.04910</td>
<td>-20.44805</td>
<td>.95916</td>
</tr>
<tr>
<td>Equal variance not assumed</td>
<td>-1.930</td>
<td>15.810</td>
<td>.072</td>
<td>-9.7444</td>
<td>5.04910</td>
<td>-20.45853</td>
<td>.96964</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER V
SUMMARY, CONCLUSIONS, SUGGESTIONS FOR FUTURE RESEARCH

This chapter contains a summary of the results of this study, which includes the conclusions of this study and suggestions for future research. The interpretations of this study are based upon the findings as indicated in Chapter IV. The purpose of this research was to examine the perceptions of principals in Baldridge and Non-Baldridge Schools and to determine if standard achievement is distinguishable when comparing MEAP scores in Baldridge and Non-Baldridge Schools.

Summary

This research study was a qualitative and quantitative inquiry that examined the perceptions of elementary principals in Baldridge and Non-Baldridge schools. This study examined the perceptions of six elementary principals regarding school characteristics and leadership practices. Three Baldridge principals and three Non-Baldridge principals were interviewed regarding the implementation of school improvement processes. Thirteen questions were asked to each individual principal regarding the implementation of their school improvement process. Thirteen questions were asked and analyzed of similar Baldridge and Non-Baldridge schools. An analysis was completed of Baldridge and Non-Baldridge principal perceptions of the school improvement implementation process.

This study further examined the results of a School System Check Level III. The School System Check Level III is a tool which compares the individual school against a specific set of performance indicators. Each statement required perceptions of principals,
which ranked from 1-4, their level of proficiency on each of the categories and specific areas of the School System Check Level III.

A third analysis, using a quantitative approach, was completed on MEAP (Michigan Educational Assessment Program) scores for 4th and 5th grade students, in math, reading, science and social studies. An Independent Sample t Test was conducted to determine the statistical significance between the Baldrige and Non-Baldrige Schools. Further analysis was done by examining patterns in the actual MEAP scores.

Research Question 1: What are the perceptions of the principals of Baldrige Schools, regarding school characteristics and leadership and the degree to which these practices affect student achievement?

Research Question 2: What are the perceptions of the principals of Non-Baldrige Schools, regarding school characteristics and leadership and the degree to which these practices affect student achievement?

Research Question 3: How does student achievement on MEAP differ between the Baldrige and Non-Baldrige Schools?

To answer Research Questions 1 and 2 the researcher used content analysis to analyze the responses of the thirteen interview questions regarding principal perceptions of the school improvement process. The perceptions were first analyzed individually and then studied comparatively to determine a principal’s perception regarding school improvement implementation processes. The responses from principals of Baldrige and Non-Baldrige schools were compared to determine common themes. In addition, a School System Check Level III indicated the level the principal perceived the school to have accomplished the performance indicators in the seven categories of: Leadership, Strategic Planning, Student
Stakeholder and Market Focus, Measurement Analysis, and Knowledge Management, Faculty and Staff Focus and Performance Results.

To answer question 3, an independent sample t test was used to analyze the independent variable, MEAP scores.

Conclusions

According to the Baldrige National Quality Program the Baldrige Criteria for Performance Excellence has evolved to assist educational institutions to an "integrated systems perspective of overall organization performance management" (p. 10). Though the framework is intended to address all of the organization's requirements, the primary focus is on teaching and learning.

This study considered the perceptions of Baldrige and Non-Baldrige principals regarding school characteristics and leadership practices as it relates to the state assessment, MEAP scores. This study is centered on the principles and processes of the Baldrige Criteria. According to Arif and Smiley (2003) Baldrige is thought to stimulate the development of continuous improvement in education, produce a culture of sharing and provide a framework that allows for innovative ideas.

The quantitative analysis, an Independent Sample t Test, indicated that there was no statistical significance when comparing Baldrige school MEAP scores to Non-Baldrige state assessment scores in math, reading, science and social studies.

A further analysis of the data, looking at the actual scores, did not determine any patterns of differences for either the Baldrige or Non-Baldrige schools. The selected three year period did not comparatively reflect any notable differences in the Baldrige schools compared to the Non-Baldrige Schools. However, both Baldrige and Non-Baldrige schools
showed improvements during this three year period in all subject areas. There are several factors including transient population of students being tested, internal environmental factors, different levels of emphasis of benchmarks being taught, which may have impacted the scores and were not examined in this study.

In addition, the perceptions of the Baldrige and Non-Baldrige principals differed. The Non-Baldrige principals rated themselves higher in most categories than did the Baldrige principals. The Baldrige principals, who had the greater understanding of the terminology of the Systems Level Check III, perhaps ranked themselves more critically than did the Non-Baldrige principals.

Findings as it Relates to the Literature

Baldrige Schools

At a time of Michigan's school report card, Education Yes!, and the No Child Left Behind Act, all schools found it necessary to find and implement a process that could raise academic scores and ensure continuous improvement. Both Baldrige and Non-Baldrige schools in this study sought improvement in performance of students. The Baldrige schools sought a process of systemic change. Supporting the findings of the perceptions of Baldrige principals is the research of Barth et al. (2000) who stated, "Quality principles and the Baldrige Criteria provide a proven set of processes and tools for creating systemic focus and alignment and for managing the process of change" (p. 3).

Coneyers (2000) stated, "We are convinced that total quality can become a self-perpetuating methodology that can be used effectively in schools and classrooms to bring about systematic, continuous improvements" (p. 22). To affirm the research of Coneyers the findings indicated the Baldrige principals unanimously perceived the Baldrige Criteria
provided an approach that led to a belief the organization, teachers and ultimately student achievement would be improved. The Baldrige principals noted improvements in staff morale, school climate, focus on learning, and curriculum alignment. One of the Baldrige principals stated, "...because I believe in it, because of the results we get from kids".

The vision of the Baldrige school improvement practices was led by the leadership of the school district which included the superintendent, principals or teachers. Visionary leadership offered clear goals which imparted opportunities for focused school improvement efforts. The Baldrige schools were motivated to be highly organized and systemic systems for learning. These findings support the research of Bonstingl (1996), "Because of these redefined leadership responsibilities, administrators and other school leaders are essential players in initiating and maintaining the transformation process required to build Schools of Quality" (p. 45).

As a result of positive leadership, the school improvement processes in the Baldrige schools were found to be effective. These school improvement efforts were stated to have impacted instructional practices and thereby improved student achievement. All of the Baldrige schools noted overall continual improvements on the state assessments. These findings are affirmed in the research of Edds (2000), where Baldrige was found to have a positive affect on student achievement and school improvement efforts.

On-going training was important to the Baldrige school principals. The principal's believed that the process was on-going and new strategies were continually being learned. The findings are supported in the literature of Barth et al. (2000). Barth et al. stated, "Because quality and the Baldrige Criteria are systemic reforms, training needs to permeate the system" (p. 12). "Teacher and administrators need access to timely and effective training
to help them adopt new practices and learn to use new tools” (p. 9). In addition, the findings are supported by Toberge and Curtis (2002) which stated, “School improvement does not begin with one-shot teacher in-service activities, new and revised curricula, raised standards or state mandated proficiency tests. These ideas have minimal effect if the school culture does not embrace, engage in and support meaningful change. School improvement begins with development-development of people and the school culture to keep the organization vibrant and prepared to meet new needs and challenges. It involves recognizing the need for change, understanding the change and building support structures that lead to focused change and school improvement” (p. 2)

The findings in this study, indicated by the perceptions of the Baldrige principals, demonstrate that data allowed a self-assessment for continuous improvement. All of the schools utilized data to effect change in the organization and the process resulted positively for each of the Baldrige schools since implementation. These findings are supported in the research of Barth et al. (2000). According to Barth et al., “Data-based decision-making is a fundamental concept of the Baldrige process. Data allow the analysis of performance against goals and standards and the identification of areas in need of improvement” (p. 13). Additionally, according to the research of Lahee, Dawson, Alvin, and Yengley, (2002), “Data-driven decision making is the inescapable future of educational administration” (p. 6).

The Baldrige school principals perceived the Baldrige Criteria as an effective means of continual improvement for students. The Baldrige principals made such statements as: Principal A.1 states, “We have definitely seen increases. So I think that is certainly or has seemed to make a difference”. Principal B.1 stated, “So I would never go back. I’m sold on it”. When asked about the evidence that Baldrige was working principal C.1 stated,
"Improved performance, improved student performance". These findings are affirmed by Edds (2000) in his study stating, "Baldrige Criteria is an assessment system that can have a positive effect on student achievement and school improvement in the current system of public education" (p. 173).

Non-Baldrige Schools

Many schools over many years have utilized the methodologies of NCA to formulate school improvement practices. The Non-Baldrige schools in this study utilized NCA, or processes similar to NCA as their school improvement processes. The Non-Baldrige school improvement plans consisted of selected acts of improvement to specific areas. These practices were followed in compliance with the established procedures of the school district.

The noted process led to improvements in most of the academic areas. Even though the staff of the Non-Baldrige schools did not embrace the process the data indicates that the school improvement practices had a positive impact on student achievement.

There are many improvement processes that were beyond the scope of this study. Many of these processes may very well yield positive and sustainable results. What should be considered here is the evidence of school improvement practices in both Baldrige and Non-Baldrige schools which positively impacted student achievement. Ultimately, it is not the title of the process that matters, but whether the process produces high performing, sustainable, learning systems.
What Was Learned From This Study

The investigations of this study led to the following conclusions:

Interviews

The perceptions of the principals were differentiated between the Baldridge and Non-Baldridge school principals. Major points of emphasis include the following items:

Baldridge
1. Baldridge schools articulated an understanding of the systemic process of continual improvement for all students.
2. The Baldridge school principals believed in and valued the process.
3. The Baldridge school principals had an emphasis on continual training that they believed helped to engage focus for teachers and impacted in the classroom.
4. Data was utilized as a means for student responsibility in their learning, method of sharing with stakeholders, and as a part of the evaluation of processes.

Non-Baldridge
1. The school improvement process focused on the areas of weakness to provide school improvement goals.
2. The principals did not articulate that they embraced the school improvement process. The principals acknowledged the school improvement process as being restrictive.
3. Ongoing training was not considered essential in the Non-Baldridge schools.
4. Data was collected but not used utilized for particular purposes. The principals stated that they collected data, though it did not appear that it was being disaggregated or shared in a way that could lead to impacting student performance.
**Systems Level Check III**

The Non-Baldrige schools consistently rated themselves much higher than the Baldrige principals. However, the data collected in interviews was not always consistent with the higher ratings. Under the Baldrige system, the higher ratings would indicate a high performing system that maintains lasting improvements through a systemic approach. Therefore the Non-Baldrige MEAP scores should reflect a greater difference than the Baldrige schools.

In addition, the Systems Level Check III is a Baldrige instrument and consequently has limitations to the Non-Baldrige schools. The Non-Baldrige schools did not have the same understanding of the instrument and understanding of the terminology of the instrument. The rankings may have been similar if the Non-Baldrige principals had been provided the same understanding to more critically analyze their practices as did the Baldrige principals.

**MEAP**

The Independent Sample t Test did not show a statistical significance between the Baldrige and Non-Baldrige schools. When comparing the scores, the Baldrige and Non-Baldrige schools shared similar levels of achievement.

The Systems Level Check III and MEAP scores of this study do not provide evidence of a significant difference between Baldrige and Non-Baldrige schools. However, the Baldrige principals reported that the systemic process, as compared to the previous NCA process, as more appropriate to build a system of continual progress and is supported through the literature. All of the Baldrige principals believed that it met the needs of all students'
opportunity to make continual academic progress. They recognized that the importance of student responsibility for their learning as essential to continual improvement.

To validate Baldrige as a pertinent school improvement process, the recent collaboration and unification of Baldrige and NCA should be considered. NCA and Baldrige merged to formulate a District Accreditation model. This assimilation is a strong indication that NCA recognizes Baldrige as a lead reform process for continual improvement. NCA has “personalized its improvement services to encompass district systemic reform processes and school initiatives”. Barth et al. (2009) stated,

“Quality management principles and the Baldrige Criteria have a long history of helping to develop organizational excellence in the private sector. There is now a strong body of evidence that these ideas and practices can be adapted for use in education and that the results are equally impressive. A decade of experience in education has created a body of knowledge and resources that can assist educators interested in using quality processes to improve their schools” (p. 13).

It should be considered that the Baldrige schools in this study were at varying stages of the process. Two of the schools indicated they had not yet fully implemented the Baldrige Criteria in its entirety. Perhaps a longitudinal study of these schools would provide evidence of the impact of the Baldrige Criteria beyond three to four years. In review of the literature one would anticipate seeing gains in the Baldrige schools over a period of four to six years. Bossmangl (1996) stated, “The Quality transformation takes time. In most cases it takes two to three years of constant commitment and hard work to redesign sub optimizing systems and processes, and another two years to see tangible, long-lasting benefits” (p. 55).
The data indicated the Non-Baldrige schools rated themselves higher in many categories than did the Baldrige schools. Conceivably, those engaged in "quality practices" understood the terminology and the impact of overall systemic change realized the effectiveness of self-evaluation as a tool for progress which may have biased the comparative results.

The expectations for K-12 public education have changed significantly. The new emphasis on accountability has prompted many changes in schools throughout the United States. Considering the number of academies, charter schools, or home schooling initiatives is evidence of changes that are occurring. The No Child Left Behind Act requires reporting of data on an annual basis. Student performance must be reported by gender, race, disability, socio-economic status, and other essential information. The states also require some of the same extensive reporting which includes the professional credentials of teachers, expansive state assessments and the number of students not tested. The Baldrige Criteria lends itself to the requirements of No Child Left Behind.

Overall, this study does not substantiate the Baldrige Criteria as a process which the academic levels of student achievement surpasses school improvement practices, such as the NCA process. However, the Baldrige Criteria certainly has potential to speak to the need as a method which may address the mandates of current federal and state legislation. Adequate yearly progress is the expectation for all school districts. As accountability increases school districts are in a quandary as to how they will provide an education in which "No Child Is Left Behind".

There have been criticisms toward the Baldrige Criteria as a practice for schools. In light of the research of the Baldrige Criteria, there is yet to be substantiated empirical
research against this practice. At the present time, not enough data has been presented to
legitimize the criticisms that have been presented. Over time the Baldrige Criteria will be
rendered through more study and analysis of its practices.

The requirements of No Child Left Behind Act mandates schools demonstrate
continual academic improvements. As we consider the current status of schools throughout
the state of Michigan, it is imperative to seek and study practices that hold potential for
continual improvements in our schools and reflect the standards of the state and federal
mandates. The review of the literature from this study and implications from the perceptions
of principals in the Baldrige schools strongly suggest Baldrige for systemic continual
improvement of schools. Further study of schools that have implemented the Baldrige
Criteria over a number of years may shed additional light of the Baldrige Criteria's impact on
student achievement.

Suggestions for Future Research

Additional research could be initiated to include more of the schools in Michigan
involved in the Baldrige process. At the time of this study, the researcher was limited to the
actual number of school participants.

In addition, a study could compare schools relative to the duration of their
implementation processes. In this study schools were at various intervals of time of
implementation in the school improvement process which may have affected this study.
Since improvement processes take time to be fully implemented, it is suggested that a study
be conducted to better understand the long term impact of the Baldrige Criteria.

There will be at least three school districts in the state of Michigan involved in the
new NCA/Baldrige District Accreditation beginning in 2005. A study of the successes or
challenges of the school districts that will employ the new NCA/Baldrige accreditation model could provide greater insights of the Baldrige Criteria as a school improvement process. A longitudinal study of the newly formulated NCA/Baldrige school improvement model could be studied.

A study could be conducted on student attitude toward learning in Baldrige and Non-Baldrige schools. Since the primary purpose of Baldrige is to have students become more responsible for their own learning, it would be appropriate, to conduct a study on student attitude toward learning and the performance of students, comparing Baldrige students and Non-Baldrige students.
Reference


Baldrige National Quality Program, *Education criteria for performance excellence.* Gaithersburg, MD: National institute of Standards and Technology, Technology Administration, Department of Commerce.


