IN PURSUIT OF RELIABILITY: A DISTRICT LEVEL ACTION RESEARCH
CONCERNED WITH RESILIENCE

By

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To the Faculty of Washington State University:

The members of the Committee appointed to examine the dissertation of MICHELLE R. PRICE find it satisfactory and recommend that it be accepted.

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There is no question, we are in some extraordinary times in public education and as a country. We are challenged and pressed to the limits of our ability, skills, and energy; however, I am confident that these challenges bring us new opportunities to re-invent ourselves as a system and work collectively to meet the needs of our most precious asset, our children.

I am proud of all that we have accomplished and know that we will make the very best out of what challenges we have ahead of us. Thank you to the Moses Lake School District leadership team for all of your support and efforts to improve practice.

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Lastly, my amazing husband and children, thank you. The countless hours that I was in class, the library, or writing could not have happened without your love and support.
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Abstract

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December, 2012

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As the education policies of our state and nation set the expectation for fail-safe schools, the work of High Reliability Organizations (HROs) described by Perrow and Weick can offer insight into improving leadership practices that promise to return higher levels of student achievement. The purpose of this study was to identify, assess, and develop a plan for improving organizational resilience in district operations to support and sustain high levels of student achievement as outlined in the No Child Left Behind Act of 2001 (NLCB).

Using an action research methodology, the study focused on events, processes, and concerns that were most meaningful to key district stakeholders. Teachers and administrators in the district were surveyed and members of the executive leadership team interviewed. Collectively identifying our problem and working through the strategies for improvement.
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CHAPTER ONE
INTRODUCTION

When you are in the middle of a story it isn’t a story at all, but only a confusion; a dark roaring, a blindness, a wreckage of shattered glass and splintered wood; like a house in a whirlwind, or else a boat crushed by the icebergs or swept over the rapids, and all aboard powerless to stop it. It’s only afterwards that it becomes anything. Like a story at all. When you are telling it, to yourself or someone else.

-Margaret Atwood, Alias Grace

Background for the Study

_A Nation at Risk: The Imperative for Education Reform_ (National Commission on Excellence in Education, 1983) sounded the alarm that instigated the implementation of reform initiatives across the nation. The report warned that our education system was not meeting the needs of students and that teacher quality was a key factor in the failing system. Following that report, the concerns about the failing system were further exasperated by the results of the International Mathematics and Science Study (TIMMS) and the National Assessment of Educational Progress (NAEP) which provides an external perspective on the performance of students in the United States. Both of these studies compared student performance across participating countries in mathematics and science. While eighth grade students in the United States had an average score above the international average, peers in nine countries outperformed them. Together, these two studies ignited widespread concern over what American students know as compared to students in other countries (Abelmann et al., 1999).
In 2002, the federal government passed the No Child Left Behind Act (NCLB) which focused educational reform efforts towards improving student academic achievement in mathematics and reading. This legislation established highly qualified standards for the certified and classified staff working in classrooms, set expectations that professional development be an on-going process, and mandated states to develop accountability systems for measuring student academic proficiency (Elmore, Abelmann, & Fuhrman, 1996). Adequate yearly progress (AYP) as defined in NCLB, is the catalyst for highly reliable results – all children regardless of race, ethnicity, disability, or language must progress and achieve at grade level as measured by the state assessment that has been aligned with the standards (Linn, 2005). Whatever the faults of the assessments through which student progress is measured (Shepard, 2003), fail-safe schools is the standard. For those schools who do not meet the standard, NCLB required states to implement sanctions that can include forced changes in staffing and reduced funding (Goertz & Duffy, 2003). This policy was an attempt at ensuring that public education would exhibit highly reliable learning outcomes for all students (Bellamy et al., 2005).

In Washington, reform legislation that followed what was mandated in federal legislation was first passed in 1993. Engrossed Substitute House Bill 1209 (HB1209) was dubbed the Washington State Education Reform Act. In an effort to improve student academic achievement, HB 1209 established a performance-based educational system with detailed learning standards, assessments, and school accountability procedures. Decentralized decision-making and school flexibility were encouraged in HB1209 with
consideration given to business partnerships, parental involvement, and professional development.

The force of federal and state education policy discussed above has affected the Moses Lake School District. Increasing student performance has risen in importance for the community, the school board, and within the ranks of the teachers and administrators employed by the district. Enhanced reliability in student achievement is a critical goal of all in the district, which means that better ways of handling errors are desired. It was not too long ago that I became superintendent of Moses Lake School District (MLSD). The headlines in the community’s daily newspaper read, “Moses Lake’s new superintendent has a passion for education.” It shared that I had been hired to “create a learning environment where staff and community work in partnership,” which was the direction from the board. A school board member was quoted as saying “she is a relationship builder which is what we need.”

In my journey to become a superintendent and educational leader, I had completed my credentials for school administration and held several building principal leadership roles. This lead me to an assistant superintendent position where for seven years, I had the opportunity to facilitate improvements in curriculum, instruction, professional development and assessment with exceptional school leaders and teachers. I aspired to lead a school district, but when the school board asked me to assume the role of superintendent as my colleague and friend retired, I had to reflect on what this responsibility would truly mean. Superintendents hold a position of power and influence. The changes in public policy and expectations require school districts to respond to the
demands for reliable student learning. I knew I was committed to working with a dedicated administrative team to meet these challenges but if our community expects fail-safe performance (Bellamy et al., 2005) are they ready to talk about failure? Can we be sensitive to operations, ready to make continuous adjustments to prevent future errors or enlarging existing errors? Are we committed to resilience? Are we willing to make mid-course adjustments when problems start to occur? Are we willing and able to take a variety of extraordinary steps in pursuit of error free performance? (Weick, Sutcliff, & Obstfeld, 1999). Scholars have begun to look at how schools might apply high reliability strategies used in other organizations with zero tolerance for failure. This study was about advancing such agenda in the Moses Lake School District.

*Overview of the Chapter and Dissertation*

Chapter one continues with the introduction to the study and is divided into four sections. The first section is concerned with action research purposes and principles as they informed the methods employed in the study. The second section provides a discussion of the study’s methodology including a statement of purpose, explanation of study’s setting, data collection and analysis, and ethics. The third section explores my positionality as researcher and participant in the study. The final section provides a summary of the chapter.

In chapter two, a review of the literature will be provided. The principles and strategies of high reliability organizations (HRO’s) will be reviewed to identify the principles of anticipation and containment in leadership practice that are appropriate for a school district in order to move toward or strengthen its organizational resilience. The
review of literature will frame the theoretical, practical, and empirical significance of the study as well as define key terms and concepts that will be used throughout the study. A smaller section of the literature review examines research and theory on the superintendency.

Chapter three provides the findings of the study. The chapter is divided into three sections. The first provides a general description of the work that provided the support for the district’s movement toward more resilient organizing. The second reviews data collected and analyzed for the dissertation. The third section of chapter three offers the strategies and plans that are underway within the district given the analysis of data offered in the study.

The last chapter of the dissertation offers the conclusion as well as a discussion of the dissertation’s significance. I also provide a section in which I share my reflections on the process and outcomes.

Action Research Methodology

There is a continuum of research approaches that can be taken by a researcher. Creswell (2003) identifies three considerations that should be factored into a decision as to which research approach is used: the research problem, the personal experiences of the researcher, and the audience for whom the report will be written. Qualitative research methods are used to understand social phenomena from the perspective of the actors or participants involved, to contextualize the issues in their particular setting, and at times to change social conditions (Glesne, 2006).
A qualitative approach is the best methodology for in-depth exploration of participant’s experiences, opinions, and perceptions in a particular setting (Weiss, 1994). Qualitative research is prevalent in a number of fields such as the social sciences, journalism, history, and criminal justice. In each of these fields, the respondents are interacted with in different ways. For instance, in the criminal justice field, interviewing is specifically to learn about what happened. In the social sciences field, understanding is constructed by exploring how the respondent uses experience and perspective to make meaning.

As I considered which mode of inquiry I should use for this dissertation, I took into account the criteria Creswell (2003) suggests. Since this researcher is not interested in explaining a phenomena in statistical terms or scientifically testing a theory, the qualitative mode lent itself well to developing meaning for the phenomena.

The primary concern in my study related to mindfulness of the personal tensions I experience integrating leadership practices with the mandates for failure free schools. As this story unfolds, the practices this superintendent employs to lead a team through an improvement strategy to support high levels of student achievement should be identified. Action research is a qualitative research method that starts with a social or practical problem, such as mine. Stringer (2007) clarified that “Action research provides the means by which people in schools, business and community organizations; teachers; and health and human services may increase the effectiveness of the work in which they are engaged in” (p.1). Herr and Anderson (2005), define action research as “inquiry that is done by or with insiders to an organization or community, but never to or on them” (p.3).
The purpose of action research should be to improve practice. The qualitative approach will allow for the researcher to tell the story from the viewpoint of the participants (Fraenkel & Wallen, 2003). Looking at how my team is engaging and responding to improvement strategies lends itself to the cyclic process of fact finding, planning, strategic action, and evaluation Cunningham (1976) identified.

Barnett and Muth (2008) contend “a more viable approach to preparing practitioner – scholar leaders is to build on these professional experiences by immersing them in collaborative structures for learning about and practicing research” (p.3). Action research is collaborative in nature which takes place within the framework of the collection, use, and release of data (Peters & Robinson, 1984). Stringers asserts that action research focuses on events that are most meaningful for stakeholders, provides the context for collectively identifying our problems, and working through the strategies for improvement which in this study involves the work of a superintendent and district executive team as they strive to develop resilience in district operations to support and sustain high levels of student achievement.

The Study

The purpose of this study was to identify, assess, and improve the resilient practices in the MLSD. Specifically, the dissertation was action research carried out by the district’s leadership team to develop and begin implementation of an improvement process based on collected data to support adoption of best practices that promise in return higher levels of student achievement as outlined in educational policy. The research questions addressed by the study included:
1) How is organizational resilience perceived by the staff and administration in the district as measured by the resilient performance audits and qualitative data gathered through interview and observation? and

2) What processes, strategies, and procedures can be identified and employed to improve resilience within the district?

Study Setting

The Moses Lake School District (MLSD) is a rural school district located in the heart of the Columbia Basin on interstate highway, I-90, approximately 175 miles east of Seattle and 110 miles west of Spokane. It has been recognized by Forbes Magazine as one of the best 100 small communities in the country. While agriculture remains the base of the economy, new major technology-based companies such as REC silicone manufacturing plant and the SGL/BMW joint venture to produce carbon fiber have added a great deal to over 90 other major industries and businesses, not counting the retail outlets, which contribute to the stability of the area.

With just over 7,500 full time equivalent students, 900 teachers, administrators, and support staff, MLSD is among the top quartile, in terms of size for districts in Washington State. Growth has been a major feature of the district. The facilities have been up-dated within the last fifteen years, but growth has required over 45 portable classrooms to be used as well as three new schools added to the facility inventory. The lack of secondary space is the largest facility issue currently facing the district.

The Moses Lake School District has operated with each school site autonomous from the others. Site-based decision-making included nearly all aspects of school
operations including staffing, program design, curriculum, staff development, and materials support. It has only been in the last eight years that even curriculum adoptions and assessment tools have been common across the different buildings. This district’s organizational culture and the system dynamics that accompany it has been fractured and largely determined by teachers and administrators who are focused on “their” school. Change, however, is underway in the district as evident in the curriculum adoptions. The District’s leadership recognizes that successful schools require capable leadership to be present and when teachers are active agents in the change process school culture and school structures improve (Fullan, 1991). When values, culture, and expectations are converted into norms for behavior that are less prone to error, the organization will find reliability. This study is about advancing such an agenda in the Moses Lake School District. This dissertation is action research to improve MLSD by pursuing an agenda of developing the organizing practices and processes concerned with resilience.

Data Collection and Analysis

The study employed several techniques for gathering and analyzing data for this action research. The use of several data-gathering techniques is commonly used in action research: surveying, participant observation, interviewing, and document collection. Glesne (2006) suggested that the researcher should choose the techniques that are likely to (a) elicit data needed to gain understanding of the phenomenon in question, (b) contribute different perspectives on the issue, and (c) make effective use of the time available for data collection. I decided to use surveying as the primary data collection process in this action research project. The survey data was triangulated with information
gathered in in-depth interviews as well as observations that I made as part of my daily work experiences and reflections on organizational resilience given my reading of the literature on high reliability (Weiss, 1994). Each of these procedures is explained below.

*Survey Data and Analysis*

I surveyed my target population, which was principals, vice principals, district office administrators, and directors who make up the leadership team, as well as a randomly selected sample of teachers, counselors, and staff. The leadership team consists of 30 people. The random sample of teachers, counselors, and staff was based on a proportional representative sample strategy. The district employs 441 teachers and certificated staff in 15 buildings. McNamara’s (1994) formula for determining sample size using a margin of error of 5% and a confidence level of 99% determined the sample size of 206. Table 1 below presents how the 206 subjects selected for the sample were distributed across the buildings. The combined sample of MLSD educators was 236 people.

Selected staff and all administrators were sent an email message providing online access to the survey stored on WSU’s Skylight Matrix Survey System. The distribution of the surveys following the Tailored Design Method (Dillman *et al.*, 2009) via the internet and employed two points of contact. All subjects received an initial letter that invited
Table 1

Representative Sample of Staff by Building

<table>
<thead>
<tr>
<th>Building</th>
<th>Staff</th>
<th>Percent</th>
<th>Sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moses Lake High School</td>
<td>99</td>
<td>22%</td>
<td>46</td>
</tr>
<tr>
<td>Columbia Basin Secondary</td>
<td>15</td>
<td>3%</td>
<td>7</td>
</tr>
<tr>
<td>Chief Moses Middle School</td>
<td>55</td>
<td>12%</td>
<td>26</td>
</tr>
<tr>
<td>Frontier Middle School</td>
<td>41</td>
<td>9%</td>
<td>19</td>
</tr>
<tr>
<td>Garden Heights Elementary</td>
<td>22</td>
<td>5%</td>
<td>10</td>
</tr>
<tr>
<td>Knolls Vista Elementary</td>
<td>17</td>
<td>4%</td>
<td>8</td>
</tr>
<tr>
<td>Lakeview Elementary</td>
<td>22</td>
<td>5%</td>
<td>10</td>
</tr>
<tr>
<td>North Elementary</td>
<td>19</td>
<td>4%</td>
<td>9</td>
</tr>
<tr>
<td>Larson Heights Elementary</td>
<td>21</td>
<td>5%</td>
<td>10</td>
</tr>
<tr>
<td>Longview Elementary</td>
<td>25</td>
<td>6%</td>
<td>12</td>
</tr>
<tr>
<td>Midway Elementary</td>
<td>20</td>
<td>5%</td>
<td>9</td>
</tr>
<tr>
<td>Peninsula Elementary</td>
<td>17</td>
<td>4%</td>
<td>8</td>
</tr>
<tr>
<td>Sage Point Elementary</td>
<td>26</td>
<td>6%</td>
<td>12</td>
</tr>
<tr>
<td>Park Orchard Elementary</td>
<td>21</td>
<td>5%</td>
<td>10</td>
</tr>
<tr>
<td>Special Services</td>
<td>21</td>
<td>5%</td>
<td>10</td>
</tr>
</tbody>
</table>

them to participate. All subjects were promised confidentiality. The cover letter included a personal invitation “to answer a series of questions about resiliency in your
school or place of work” (see Appendix A). A week later a second letter was sent that thanked all subjects for responding and invited those who had not responded to do so (see Appendix B).

Twenty five of the 30 administrators responded and completed the high reliability surveys. The achieved response rate of 83% was considered excellent and assured input from all building leadership teams across the district.

The teacher response rate was lower, but also impressive at 67% of individuals surveyed. The 139 teachers who provided their opinions also assured that data from faculty at all buildings in the district were included of the study.

The survey purpose was to probe our organizations current state with respect to the five principles of HRO’s. The survey was comprised of five audits modified from Weick and Sutcliffe (2007) including: (1) preoccupation with failure, (2) reluctance to simplify, (3) sensitivity to operations, (4) commitment to resilience, and (5) deference to expertise (see Appendix C-G).

The first audit (Appendix C) helped me to probe the degree to which my organization has a healthy preoccupation with failure. Failure in an HRO is catastrophic. Our community expects fail-safe performance (Bellamy et al., 2005). Failure implies that someone didn’t anticipate what and how things could go wrong or something wasn’t caught as soon as it could have been (Weick & Sutcliffe, 2007). Embracing failure means that we are willing to attend to weak signals that may be symptoms of larger problems. By attending to the weak signals, we are able to implement strategies, practices and policies that preclude the failures.
Reluctance to simplify (Appendix D) was the second audit. HRO’s tend to obsess about the question of what they can ignore. This audit probed the existence of how or if our organization “takes nothing for granted.” Mindfulness with attention to contexts helps to ensure differentiated viewpoints are used to establish more varied precautions; trust and respect are attributes found in an organization that resists simplifications.

Appendix E is an audit that is intended to measure an organizations sensitivity to operations. A complex system is interdependent and the understanding of the staff of the interdependence is critical. “If you want to manage unexpected events, you need to put a premium on the detection of small failures, differentiation of categories, and watchfulness for moment-to-moment changes in condition. Relationships and continuous conversations are essential in handling risks” (Weick & Sutcliffe, 2007). HRO’s make adjustments along the way, they don’t wait until the catastrophe to respond. Being sensitive to operations is a strategy to correct failures before they happen.

The fourth audit (Appendix F) measured the organization’s commitment to resilience. Central to an HRO is its ability to make adjustments mid-course before the failure occurs. Being able to diagnose and apply interventions before the catastrophe is as important as bouncing back from errors and using strategies for coping in order to continue operations. Our organization encounters daily surprises. How do we respond? Are we able to contain the errors and focus and apply technical skills to bounce back? In both HRO’s and school systems this requires technical competence, ongoing training, flexible decision-making and authority, and the rewarding of error reporting (Frederickson & Laporte, 2002, p.34).
The fifth and final audit assessed the level of deference to expertise in our organization (Appendix G). Decisions must be made closest to where the problem or issue originates. Seniority and position should not always drive decision-making. Those that are most impacted should be involved and know when to acquire authoritative or expert assistance.

I used the audits to get a baseline of where the staff and leadership team think we are at in relationship to becoming an HRO and to identify processes, strategies and procedures to improve resilience within the district.

*Qualitative Data and Analysis*

Other data I produced and collected for this study include my personal journals, observation notes, open-ended interviews, newspaper accounts, and emails (Cresswell, 2003). This study was built on my daily personal accounts as a female superintendent. My lived experiences, as recorded in a daily journal, account for a large segment of data. Anderson (2006) depicts this method as complete member research (CMR).

In order to fully capture the essence of my lived experiences, field notes were kept on my observations and interactions in meetings and in classrooms. The field notes helped me to fully describe what I sense as key components of the observations or interactions paying attention to feeling tones, impressions, and interactions, both verbal and nonverbal (Emerson, Fretz, & Shaw, 1995).

Interviews were also conducted with a number of administrative team members and faculty. While an interview guide was prepared, this researcher carefully listened to
the respondents and when markers were given, the researcher explored further. The interviews were transcribed verbatim, coded, and analyzed by the researcher.

Planned and unplanned observations were conducted during the period of the study. The observations included a number of different activities such as training during a learning improvement day, grade level collaboration time, classroom walk through with the principal, and staff meetings. Each observation varied in length depending on the interaction. Artifacts such as schedules, flyers, policies, agendas, and meeting minutes were also collected. Common themes emerged from the data and were supported by the literature review.

Ethics

A formal request to conduct the study was presented to the school board. All data collected has been maintained in a secure manner until the study is complete at which time it will be destroyed. A master list of participants and their pseudonyms was maintained separate from the data. Given the nature of an action research study, confidentiality could not be promised. Every effort was made to maintain confidentiality of the participants and no harm was done to them as a result of participating in the study. The research was presented to and approved by Washington State University’s Institutional Review Board.

Helping all children reach academic success is the purpose of education. Each professional comes to the table with a different set of skills and experiences that frames the work that they do. There is an abundance of research that is emerging on how educators can be more effective and efficient in meeting the academic needs of students.
Every effort was made to make the respondents feel valued, safe, and able to withdraw at any time without repercussion.

Researcher Positionality

The researcher’s positionality is explained using the preparatory work for the dissertation that has been undertaken in the district to date. I recognize that my role as superintendent of the district may have caused some challenges. I relied on my relationships with my staff and a culture of risk taking without repercussion as the normative practice to assure quality and reliability.

This study documents my journey and mindfulness of the personal tensions I experienced integrated with leadership practices and the mandates for failure free schools. It must also be noted that our work in the Moses Lake School District takes an entire team. I may provide the leadership for the team but each of the leadership team members bring a set of skills, strengths, and attitudes that contribute to the whole.
CHAPTER TWO
REVIEW OF LITERATURE

The literature for this study is divided into two sections given that it draws on two distinct bodies of literature. The first section pertains to research and theory on high reliability organizing. This literature is reviewed to provide a foundation for understanding the definitions for reliability, resilience, mindfulness, and related concepts as well as an explanation about how scholars theorize their relationship. The second section pertains to literature on educational leadership. Research and theory on the superintendency is explored, particularly as it relates to leadership roles and practices. The definitions and concepts are explored for the foundation and explanation about district leadership.

High Reliability Organizing

The federal and state educational policies have raised the stakes so high for schools and students that high reliability has become a critical aspect for school success (Bellamy, Crawford, Marshall, & Coulter, 2005). The call for school leaders to be more mindful has caused Stringfield (1995, 1998) and others (Bellamy, Crawford, Marshall, & Coulter, 2005) to look to the application of research from other fields where fail-safe performance is the standard. High Reliability Organizations (HRO) come from the management science literature where nuclear power plants, hospital emergency rooms, and air traffic control systems operate under high risk conditions but “take a variety of
extraordinary steps in pursuit of error free performance” (Weick, Sutcliffe, & Obstfeld, 1999, p.84).

Errors, as defined by Zhoa and Olivera (2006) are individuals’ decisions and behaviors that result in an undesirable gap between an expected and a real state that may lead to potential negative consequences” (p. 1013). Reason (1990) identifies two types of errors: the person approach and the system approach.

The person approach focuses on the unsafe acts, both errors and procedural violations, of people. It views these unsafe acts as arising primarily from mental processes such as forgetfulness, inattention, and carelessness.

The system approach focuses on the conditions that the individuals work in and errors are typically viewed as consequences, not causes. The central idea of the system approach is that the human works within a system that cannot be changed and therefore the errors are a result of the factors relative to the system.

Reason (2000) stated, “Error management has two components: limiting the incidence of dangerous errors and since this will never be wholly effective, creating systems that are better able to tolerate the occurrence of errors and contain their damaging effects” (p. 3).

To manage the unexpected, resilient practices can be built around principles of anticipation and containment. Proponents of the principles of anticipation believe prevention and reliability is attained by consistently anticipating and identifying events and occurrences that cannot happen; identify all activities, conditions and events that may lead to them, and then create a systematic set of plans and procedures to avoid them
Containment reflects the organizations ability to make positive adjustments while enduring challenging conditions (Sutcliffe & Vogus, 2003). Organizational reliability depends on the preparedness of the organization to be mindfully reactive (Weick & Sutcliffe, 2007).

High Reliability Organizations (HROs) have not been infused into mainstream organizational theory, mostly due to their unique and complex potential for catastrophic consequences (Weick, Sutcliffe, & Obstfeld, 1999). Weick & Sutcliffe (2007) introduced five key ideas that are implemented as underlying principles of an HRO: preoccupation with failure, reluctance to simplify, sensitivity to operations, commitment to resilience, and deference to expertise. The first three principles of an HRO have been identified as the principles of anticipation while commitment to resilience and deference to expertise are strategies of containment, aiming to prevent unwanted outcomes after the unexpected event occurred (Weick & Sutcliffe, 2007). Laporte and Consolini (1991) argue that the HRO research base can and should apply to education. Bellemy et al., on the other hand argues that HROs have complex and standardized procedures and can function as centralized and tightly coupled organizations.

**Anticipation**

Specifically, anticipation means “mindful attention to failure, simplification, and operations” (Weick & Sutcliffe, 2007; p. 45). The recent hype on the arrival of the pandemic Avian flu or the Swine flu provides for a good example of being prepared for the unexpected involving more than just expecting it. The Center for Disease Control (CDC) needed to take action to stop the development of these health-risk incidents. The
CDC, together with the World Health Organization identified the events and occurrences that could not happen, identified the symptoms or conditions that may lead to them, and created procedures to avoid them. To create reliability, they educated the public, created surveillance and preparedness processes, and made available tools to minimize the immediate threat. The Anticipation required the organizations to attain reliability. To date, the spread has been minimized due to the mindful attention (anticipation) of the organizations.

The concept Wheatley and Kellner-Rogers (1995) identify as necessary for reliability translates well for anticipation in the school setting. Ensuring reliable learning for all children requires the adoption of standards for student learning and assessment measures with active use of multiple information sources to monitor individual progress.

*Preoccupation with failure*

Preoccupation with failure is one of three principles of anticipation. It doesn’t mean that the organization or people that work within it are paralyzed by fear and anxiety about what might go wrong. It means that they pay unwavering attention to “weak signals” (Weick & Sutcliffe, 2007), which may be indicators of a larger issue. It means that when they identify the weak signals, they have strategies and systems in place to prevent complete failure. Weick and Sutcliffe (2001) describe preoccupation with failure as “treating any lapse as a symptom that something is wrong with the system, something that could have severe consequences if separate small errors happen to coincide at one awful moment” (p. 10).
The longer difficult circumstances remain unaddressed, the less predictable and controllable system interactions become (Weick & Sutcliffe, 2007). Detecting symptoms of failure as early as possible increases the possibility of preventing such failure. In schools, maintaining and using powerful databases (Reynolds & Stringfield, 2004) is critical to early detection. Use of formative and summative assessments, collaborative analysis of student work, and teacher referrals (Bellamy, 2005) can also help with detecting threats that lead to failure. Embracing failure means that we are willing to attend to weak signals that may be symptoms of larger problems. By attending to the weak signals, we are able to implement strategies, practices and policies that preclude the failures.

As an organization is paying attention to weak signals, also called near-miss events, Reason (2000) discusses the importance of near miss reporting and the necessity for it to part of the organizational culture. In schools, a team approach to reviewing data maintained in the databases would foster and support such a culture.

**Reluctance to simplify**

Reluctance to simplify is another principle of anticipation. HROs are typically tightly coupled systems or complex environments. “Knowing that the world they face is complex, unstable, unknowable, and unpredictable, HROs position themselves to see as much as possible” (Weick & Sutcliffe, 2001, p. 11). Complexities associated with operations are not necessarily compatible with simplified approaches. The concept of reluctance to simplify can focus too much on organizational successes and lead to complacency and further simplifications (Miller, 1993). Simplifications can ultimately
lead to decreased awareness of the unfolding of complex events and unanticipated changes can occur. Collins (2005) eloquently summarized this operational hazard in warning that leaders who think of themselves and that of their team as superior tend be those who stumble. Mediocrity arises out of complacency given success and over confidence.

The breakup of the space shuttle Columbia provides for an example of how oversimplification can lead to serious failure. NASA’s investigation report (National Aeronautics, 2003) identifies foam strikes as the primary factor in the Columbia tragedy. Those same foam strikes had been documented over a 22 year period without any incident. Foam strikes became a normal event. “An unfortunate illustration of how NASA’s culture bias of optimistic thinking undermined effective decision making” (p. 181).

People within organizations are very good at finding patterns but this typically translates into placing things into categories of what we observe into what we already know. Each human being brings knowledge, skills, attitudes and experiences to the table with them. When we categorize things we observe into things we already know, we create “blind spots” where believing is seeing (Weick, 2011).

Hoy, Gage, and Tarter (2006) argue that schools need to simplify less and “see” more. Schools are complex dynamic organizations where teachers and administrators need to broaden their perspectives and be willing to unpeel all of the layers to get below the surface and beyond what they believe to be the obvious. Diagnostic and progress monitoring opportunities must be implemented in order to drill down beyond the
symptom to the root cause. Mindfulness with attention to contexts helps to ensure differentiated viewpoints are used to establish more varied precautions.

*Sensitivity to operations*

The third and final principle of anticipation is sensitivity to operations. This principle is about staying focused on the core function of the organization (Hoy et al, 2006). Paying attention to the front line where the real work gets done (Weick & Sutcliffe, 2007). Relationships and continuous conversations are essential in handling risks that have not been anticipated (Weick & Sutcliffe, 2007). Trust and respect are necessary attributes found in an HRO where sensitivity to operations is part of the culture.

To be sensitive to operations is to monitor and correct errors of foresight. All stakeholders in the organization must be continuously apprised of the events as they occur. Managers or in the school setting, administrators, need to have ongoing interactions with those that are closest to the students (the teachers). Administrators need to be accessible when situations develop.

Professional learning communities (PLC) could be a catalyst for school districts to model sensitivity to operations through frequent meetings with intentional conversations about the core of our business, learning, while the experts working closest to the core have the responsibility, autonomy, and authority to respond to the student’s unique needs. Focused PLC’s attending to the following questions (Dufour, 2006) would ensure greater consistency and a guaranteed and viable curriculum for all children if in fact, we respond when anomalies are found and acted on before they rise to failure.
1. What do we want students to learn?
2. How will we know if the students have learned it?
3. How will we respond when a student experiences difficulty in learning?
4. How will we enrich and extend the learning for those who are proficient?

HROs train their personnel how to respond when unplanned events occur and how to react when the response to such events is not covered in policy or procedure (Roberts & Bea, 2001). They structure flexibility into their operations so that conditions that change at a rapid pace can be responded to in a timely and more effective manner. (Roberts, Yu, & van Stralen, 2003).

**Containment**

HROs are not infallible, policies and procedures can be put into place, humans can be trained and supported but sometimes, all of those anticipatory actions are not enough…the unexpected still occur. When HROs experience failure, the principles of containment should enable them to contain the event and mindfully bounce back from the problem (resilience). Weick, Sutcliffe, & Obstfeld (1999, p.100) define resilience as the capacity to “bounce back from errors, coping with surprises in the moment and to utilize the change that is absorbed.”

Scholars have argued that HRO’s address the tight coupling and the complexities of resilience in organizing responses to failure to mindfulness (Weick, et al., 1999). Mindfulness is really about intentionality and the quality of attention. Weick defines mindfulness as a “combination of ongoing scrutiny of existing expectations, continuous refinement and differentiation of expectations based on newer experiences, willingness
and capability to invent new expectations that make sense of unprecedented events, a more nuanced appreciation of context and ways to deal with it, and identification of new dimensions of context that improve foresight and current functioning” (Weick & Sutcliffe, 2007, p.32). Mindfulness is a critical attribute of an HRO.

The idea of mindfulness is about paying attention to your expectations and not getting side tracked. When one is distracted, the opportunity for vulnerability and error is magnified. Mindfulness requires quality attention to the big picture. The “big picture” includes the here and now, sometimes referred to as situational awareness, as well as the future.

Small failures have to be noticed (the principle of preoccupation with failure), and their distinctiveness must be retained rather than lost in a category (reluctance to simplify). People need to remain aware of ongoing operations if they want to notice nuances that could be symptoms of failure (sensitivity to operations). Attention is also crucial for locating pathways to recovery (commitment to resilience) and the knowledge of how to implement those pathways (deference to expertise). (Weick & Sutcliffe, p.33)

*Commitment to resilience*

Errors are inevitable; it’s not a question of if but a question of when. The HRO principle, commitment to resilience, is about being “mindful about errors that have already occurred and to correct them before they worsen and cause more serious harm” (Weick & Sutcliffe, 2005, p. 68). When the unexpected happens, the organization rebounds with persistence, resilience, and expertise (Hoy, Gage, & Tarter, 2006).
Organizations that are committed to resiliency expect to come across surprises in their work. Focusing on coping skills enables them to respond to the surprises as they occur. They don’t make assumptions but instead, continuously ask questions to seek to understand. Weick and Sutcliffe argue resilience arises when people act after thinking or act in ways, such as gathering more information, to think more clearly. Resilience occurs when the organization continues to maintain its core functions despite the breakdown of different parts within the system. Resilience is a form of control (Weick & Sutcliffe, 2005). “A system is in control if it is able to minimize or eliminate unwanted variability, either in its own performance, in the environment, or in both….The fundamental characteristic of a resilient organization is that it does not lose control of what it does but is able to continue and rebound” (Hollnagel & Woods, 2006, p.348).

Weick and Sutcliffe, 2005 outline three components of resilience: (1) the ability to absorb and preserve functioning despite the presence of adversity, (2) an ability to recover or bounce back from events, and (3) an ability to learn and grow from previous episodes of resilient action. A commitment to resilience requires continuous learning and a willingness to question what is happening. HROs structure flexibility into their operations so that rapidly changing conditions can be addressed with a more timely and effective response (Roberts, Yu, & van Stralen, 2003).

Deference to expertise

To be mindful requires an organization to adopt operating principles that are grounded in a deference to expertise, the final principle of containment. The process of deferring to expertise involves placing decision-making authority on the people within
the organization who have the greatest expertise, regardless of their position or title
within the organization. As Weick and Sutcliffe (2001) elaborate:

The decision structure is hierarchical in the sense that important choices must be
made by important decision makers, and important decision makers can
participate in many choices. But the distinctive twist in HROs is that the
designation of who is the ‘important’ decision maker keeps changing depending
on the decision maker’s specialty. (p.74)

Can dynamic systems such as schools become HRO’s? Some researchers
(Westheimer, 1989) call for standardization and centralization in schools, teachers with
autonomous ideology and in practice as it relates to curriculum seem to be buffered from
external demands (Weick, 1976). The organizational differences between schools and
HROs might suggest that HROs should be used as a metaphor instead of a model
(Bellamy et al., 2005).

Stringfield (1995, 1998) on the other hand, argues that a school system could
follow suit with highly reliable organizations if certain conditions and characteristics are
put into place:

1. A finite set of clear goals, shared at all organizational levels.

2. A shared belief across the levels that failure to achieve those goals would be
disastrous.

3. An ongoing alertness to surprises or lapses. Small failures that can cascade
into major academic problems must be monitored carefully.
4. The building and maintenance of powerful databases. These databases are (a) relevant to core goals, (b) rich in triangulation on key dimensions, (c) real-time available (i.e., before failures cascade), and (d) regularly crosschecked by multiple, concerned groups.

5. The extension of formal, logical decision analysis as far as extant knowledge allows. Many regularly repeating tasks become standard operating procedures.

6. Initiatives that identify flaws in standard operating procedures, and honor the flaw finders.

7. Extensive recruiting.

8. Constant, targeted training and retraining

9. Serious performance evaluations. In HROs, monitoring is mutual, without counterproductive loss of overall autonomy and confidence.

10. Because time is the enemy of reliability, HROs are hierarchically structured.

11. Clear valuing of the organization by their supervising organization(s). All levels work to maintain active, respectful communications.

12. Short-term efficiency takes a back seat to very high reliability.

District Leadership

Educational policy makers and practitioners must achieve greater reliability.

Schools need resiliency in leadership practice in order to meet the publics’ expectations of fail-safe schools. The No Child Left Behind Act of 2001 (NCLB) established unprecedented public accountability for high levels of student achievement. The federal
and state educational policies, standards, and assessments have forced schools to become intentional, goal-oriented organizations at the same time that they strive to meet community expectations (Elmore, 2000). School organizations are challenged to ensure that every child, regardless of school experience, language barrier, or disability, meets the adequate yearly progress standard and is achieving at grade level.

Superintendents play a key role in the leadership of the organization. Two decades of interest in school reform are rooted in the belief that leaders affect organization performance (Gronn & Ribbins, 1996). The new leadership models have shifted our understanding of leadership from maintaining order to an intentional practice focused on improving student achievement. I will, at this time, develop the conceptual framework that will define leadership as used throughout this dissertation.

Bennis (1985) concluded that leadership is one of the most observed and least understood phenomena on earth. A number of theorists have contributed to our understanding of leadership. In order to make sense of the various theories on leadership, it is necessary to first identify what leadership is. For the purpose of this paper, “Leadership is an influence relationship among leaders and followers who intend real changes that reflect their shared purposes” (Rost, 1993, p. 102). Rost (1993) identifies four essential elements that must be present for leadership to occur: a relationship based on influence, leaders and followers are the people in the relationship, leaders and followers intend real change, and leaders and followers develop mutual purposes.

Building on the work of Burns (1978) and Bass (1985), Leithwood (1994) adapted the transformational leadership model to schools. The ethical and moral
dimension of transformational leadership is characterized by the ability to bring about significant change in the organization’s vision, strategy, and culture. Vision, shared values, and common ideas are used to build relationships and to enlist followers in the process.

Transformational leadership develops followers into leaders. Leithwood (1994) expanded on Bass’s four areas of transformational leadership by adding in order to be “effective” leaders personal attention must be given to individual staff members who appear to be left out (individual consideration). The leader must help staff members think of old problems in new ways (intellectual stimulation). High expectations must be communicated (inspirational motivation). Lastly, an effective leader must provide a model for the behavior of teachers (idealized influence).

Leadership is not a person or position, leadership is the process of leading others. In education, leadership is a component of the work of a superintendent. The superintendency is not a well-researched leadership position in educational administration. Historical overviews draw a picture of a distinctly male role who has been a larger-than-life symbol in the community. Spalding (1954) identified the “main responsibility is to impart democratic qualities to a school system and to preserve them for it” (p.53). At one time, the moral duties of the superintendent were viewed second only to the minister in upholding the values for the community (Wilson, 1960). By the end of the 1960’s, the superintendency became dramatically influenced by scientific management theory. The position saw a change from a scholar-educator to that of a businessman. (Callahan, 1962). Typical duties of the inaugural superintendents
included coordinating educational programs among district schools, managing resources both systematically and efficiently, and allocating funds (Kowalski & Reitzug, 1993). In a 1968 publication from the American Association of School Administrators, the position of superintendent was clearly defined as: superintendents are responsible for all functions such as planning and evaluation; organization; management of personnel, business, buildings, and auxiliary services; provisions of information and advice to the community; and coordination of the entire school system (p.6).

In a later publication, the American Association of School Administrators (2003) emphasizes the need for superintendents to serve their districts in the curriculum and instruction development. According to Grogan and Sherman (2003), Superintendents must be dedicated to the continuous improvement of all schools and diverse populations of students in their district. Superintendents, as instructional leaders, must also be attuned to test-score data and discrepancies that may exist between various racial groups if they want to be sure that all students have a chance of reaching their potential. (p.231)

Superintendents serve as a crucial link between policy and action (Hallinger & Heck, 1998). Superintendents have a unique challenge in how they demonstrate their knowledge and skills and act as the catalyst for change (Kowalski, 1999). Johnson (1996) stresses the superintendent’s capacity to lead is reliant “on their own moral purpose, their commitment to education, and their courage to stand up for what they believe” (p.281)

Schools and districts face challenges to meeting the requirements of adequate yearly progress (AYP) and accountability for state assessments. The school improvement
process including setting the vision, goals, action plans, staff development planning, and evaluation of the effectiveness cannot be done by one person alone. School reform cannot be achieved by superintendents alone, they must provide the vision for stakeholders and serve as political activists (Bjork & Gurley, 2005). This perspective on school improvement and leadership requires that the “authority and influence are available potentially to any legitimate stakeholder in the school based on their expert knowledge, their democratic right to choose, their critical role in implementing decisions, or a combination of the three” (Leithwood & Duke, 1998, p.38).

Leadership to impact student learning is challenging work. Heifetz (1994) characterizes leadership as “adaptive work.” Adaptive work is demanding and risky as it requires purposeful questioning about attitudes, values, and behaviors. This potentially painful process can be dangerous both personally and professionally for the leader.

There is no question that as leaders make decisions or challenge the follower’s thinking that they stand to be “neutralized” or “taken out of the game” by the very people that they lead. Heifetz (1994) identifies several strategies to help leaders survive and thrive amidst the dangers of leading: getting on the balcony, distinguishing self from role, externalizing the conflict, identifying partners, listening, finding a sanctuary and preserving a sense of purpose.

Chapter Conclusion

Each of us as leaders has experienced the challenges familiar to anyone trying to make a difference. We have encountered success and failures as we push for change. Heifetz and Linsky (2002) argue, "You may have an overarching vision, clear, orienting
values, and even a strategic plan, but what you actually do from moment to moment cannot be scripted. To be effective, you must be able to respond to what is happening” (p. 73). For an administrator, vision is the capacity to see; to comprehend what is going on and to discern how it connects and relates to the community at large and to the school community.

The application of HRO principles are well documented to reduce failure. The literature reviewed indicates that HRO principles have the potential to create more reliable operations in a variety of fields including education. Taylor and Angelle (2000) documented the intersection between transformational leadership and the characteristics of high reliability organizations. I believe this literature posits a clear framework for conducting an action research study about building the resilience within a district as part of the leadership responsibilities of a superintendent and the district’s executive team.
CHAPTER THREE
NARRATIVE REPORT OF THE STUDY

The No Child Left Behind Act of 2001 (NCLB) and now, Race to the Top (2010) continue to drive unprecedented federal involvement in American educational policy (Cuban, 1998; Elmore, 2000; Foster, 2004). The federal and state educational policies have raised the stakes so high for schools and students that high reliability has become a critical aspect for school success (Bellamy et al., 2005). The call for school leaders to be more mindful has caused Stringfield (1995, 1998) and others (Bellamy et al., 2005) to look to the application of research from other fields where fail-safe performance is the standard. High Reliability Organizations (HRO) come from the management science literature where nuclear power plants, hospital emergency rooms, and air traffic control systems operate under high risk conditions but “take a variety of extraordinary steps in pursuit of error free performance” (Weick et al., 1999, p.84).

The research conducted for the dissertation sought to assess, identify, and improve the resilient practices in the district. Specifically, the proposed dissertation will be action research carried out by the district’s leadership team to implement an improvement process that will support best practices that promise in return higher levels of student achievement as outlined in educational policy. The research questions addressed by the study include: (a) how is organizational resilience perceived by the faculty, staff, and administration in the district as measured by the resilient performance audits and qualitative data gathered through interview and observation? and (b) what
processes, strategies, and procedures can be identified and employed to improve resilience within the district? The following chapter is organized into three sections.

The first section articulates the background work that has gone on in the district to prepare for the study. The efforts shared were part of movement to improve the resilience of the organization and the audits and strategies for improvement represent a continuation of this work. The second section describes how the organizational resilience is perceived by the staff and administration in the district. The third section reports the processes, strategies, and procedures that are being employed to improve resilience within the district given the analysis of the audits and qualitative data gathered for the study.

Preparing for the Audits

As a system, we did not have a set of clear goals that are shared at all organizational levels (Stringfield, 1995). We did not have a shared belief across our system that failure to achieve these goals would be disastrous. I knew it was time for us to start a process of defining who we were as a district and what would be the culture our community, staff, and students would know our system for. Processing this need with my cabinet (the district office administrative team), we came up with a plan that would include an outside facilitator working with our leadership team over the course of the year to help us with a K-12 alignment (clearly defining our goals). Now, we have done curriculum and assessment alignments over the years but other than that, our system was still operating as fourteen individual entities. NCLB has put us into a continuous stress mode; however, we needed to begin acting and responding intrinsically as a system. Much to the dismay of the 30 administrators that make up the leadership team, we
scheduled nine full days throughout the year to undertake this alignment process. Administrative team members were apprehensive to leave their buildings and this presented a huge obstacle. As we talked about the work that we would be doing, I was certain that all anyone could think about was the work that would be waiting for each of us when we got back. What I heard though was “we’ve all engaged in this work before and it’s been put on the shelf and never referred to again! How is this going to be different?” A great question! If we are going to achieve high performance as a system, this cannot be an exercise in futility. The real question was how is a commitment to a mindful system going to be evident in my management and leadership practice? As we went through this process, I kept my eye on how the outcome of the work was going to be infused into the daily management, communications, and politics of the school district and community.

An obstacle that we faced before even getting started was the political reality that we have been on an “essentials only” spending plan. Here I was making plans to take all of my leadership team out of their buildings for nine days which was very visible to all staff and community and I was committing to pay for an outside facilitator. In order for the board to give their blessing on this, I tied the need to our district improvement plan and to a federal grant that required teacher and principal professional development. This justification enabled us to show the need for the time, activity, and cost.

Our first scheduled day came and we all converged on an off-campus facility. The facilitator had a dynamic personality, was quickly able to make an accurate assessment of our group, and in no time had earned our trust (collectively and
individually). When he asked if our school system was created for other people’s children or was it created for our own children, the room went silent. Each and every one of us could not say that across the system, we would allow for our own children to be in all of our classrooms, participate in all programs, or even attend certain schools. Why then, did we think that our school system as a whole would be good enough for other people’s children? This was a great question to begin with and caused everyone to look deep inside for his or her own answer.

The readiness of our leadership team to go through this process was questionable. Site based decision making had allowed for years of internal competition and celebrations that drove mediocrity. Each building leader had become so emotionally invested in our own schools or departments that our lenses were fogged. Concern about the work of others and mindfulness that we are a system was nearly nonexistent. Hearing from an outsider that our schools are perfectly designed for the results we are getting was painful. Our results needed to improve. We were all working hard. We have some excellent administrators, teachers and support staff. We are all dedicated. But, did we care about each other, the work, the community, and the children enough to do something about it.

The K-12 alignment process required a great deal of personal and group reflection. We learned about our group dynamics. We developed a social contract, intended to help us become self-managers when we are together. We focused on four questions in order to develop a social contract: 1) How would you like to be treated by the leader; 2) How do you want to be treated by your colleagues; 3) How does your leader want to be treated; and 4) How do we handle conflict. By the end of day one, the
answer for each of us was yes. We cared about each other. We cared about our work. We cared about our community. We cared about our students. We are willing to do something about it, together. We each signed the social contract, committing to treat each other and our leaders with the values, beliefs and expectations that we identified. This time together was emotional. The honesty, vulnerability, respect, and risk-taking as individuals was phenomenal. I could not recall a time when a group of professionals spent time together talking about our own thinking, our own leadership styles; our personal beliefs. As an example of the vulnerability, I had no idea that a principal that I have worked with for twelve years felt incompetent when it came to offering teachers suggestions for instructional improvement. It was assumed that over time, each of us would be trained to take on the role of instructional leaders yet the question of our competence and confidence was laid out there for all to hear. As we left that evening, I reflected on Datnow and Stringfield’s (2000) assertion that school change is an active process that involves just as much changing of hearts and minds as it does policies and procedures.

Our next K-12 alignment session had a very different tone. First, as a superintendent, one of my primary responsibilities was the care of the school board. Day two and three of our alignment process was inadvertently scheduled on the same days as the school board’s state conference. When we scheduled our facilitator, the board was sure that they wouldn’t want to go to the conference. They changed their minds. Since all five board members were going, I had to make a decision between board care and support or that of the leadership team. I had every faith in my cabinet and leadership
team to be able to share and determine if there was anything that I could not live with as they worked through the alignment process. I feared sending the board members away for training…… alone….together. Thoughts kept running through my head: would they hear things and have anyone there to help with context; what if they meet their next superintendent; what if they come back with all kinds of new ideas that I would be expected to implement. I was emotionally torn as I shared with the leadership team that I would not be there for two of the days of work. The facilitator was so gracious. He spoke to the rarity of a superintendent letting a team do this work without them there. All I could think about was that I was letting them down. Perhaps the conflict was really internal and had nothing to do with my team.

In our next sessions with the facilitator, our task was to identify who we are, what are our intentional priorities and how will we use our time and resources (both human and fiscal) to become a high reliable organization.

The leadership team was separated into groups and had to come to terms with the perceived barriers to moving forward as a system. Group four identified the site based decision-making process that seems to prevent us from being more alike as schools. Group two spoke about the external pressures such as federal requirements, legislation, and grant requirements. Group five felt strongly that the union influence would be problematic. Resources and time also hit our list of perceived barriers.

Several more sessions with our facilitator resulted in passion-filled discussions and the development of a mission, vision and core principles that define the very essence of our existence as a school district and our intentionality as leaders. As a leadership
team, we rewrote our district mission, vision, and core principles. They are: Our mission: “A caring community dedicated to the success and well-being of all,” and our vision: “By 2017, 100% of students will be confident learners meeting expected benchmarks to become college/career ready.” Six core principles were identified as our foundation for making our vision a reality: 1) we are dedicated to the care and success of every student as if they were our own; never giving up on anyone; 2) we will ensure an emotionally and physically safe learning environment for all; 3) we will treat everyone with respect and integrity, while embracing differences; 4) we will employ intentional, purposeful, responsive instructional practices in every classroom; 5) we will collaboratively align all curriculum, instruction and assessment; and 6) we will actively participate in research-based professional development and collaboration aligned with our mission and vision.

We appeared to be on the right journey to establishing what Stringfield (1995, 1998) identified as high reliability organization characteristics: establishing a finite set of clear goals, shared at all organizational levels and creating a shared belief across the levels that failure to achieve those goals would be disastrous but we had some hurdles to get over first.

“Shared at all organizational levels” and “creating a shared belief across the levels” were what we were doing. The work that we had poured our hearts and souls into was not necessarily shared at all levels. I believed it was completely accepted by the leadership team but I had questions about others. We needed to make a decision. Is this who we are as a school district and is it negotiable?
After discussion with the team and with the school board, we decided that this was going to be non-negotiable. Who could disagree with what our vision was? Who could disagree with our core principles? And if they do, perhaps our district was not the best fit for them.

Our leadership team created a video of students telling their story of going through our system. A group of seniors who we hand-selected in order to have representatives who had attended each of our schools, told our staff why our mission, vision, and core principles were the right beliefs for us as a system. On one February morning, we rolled out our presentation to every staff and department in the district. We were on the right track; almost all staff agreed that these were the defining characteristics of the organization they wanted to be part of.

Yes, I said almost all staff. Over the next several months, it became apparent in crucial conversations with some staff that the organization we were becoming was not a good fit for them. They did not feel a part of setting the direction nor did they think that they could live with the beliefs and values that we had established as non-negotiables for our district. Several resignations were rendered as well as a few staff members receiving support and assistance to make another career choice.

At a future meeting, we set our finite goals. Schmoker (2005) notes that an organization that has too many goals has none. We agreed on two goals: 1) to support highly effective professional learning communities and 2) develop and implement a common language of instruction system-wide. We also agreed that all of us needed to stop avoiding crucial conversations with each other and with staff and committed to not
adding anything that was not aligned with our core principles. To end our nine days of K-12 alignment, we divided into two teams to develop action plans to meet our two goals. It was time for us to do the work within the context of doing school every day.

The background I provided above took our leadership team eight months to work through. After each three day session, we returned to our real world with students, parents, and community members needing our attention. We had some finite goals that we were going to be working towards but the real work was to be mindful of those goals through our day-to-day interactions; even when our time is consumed by the things that matter to someone else.

In Pursuit of Reliability

Probing for the HRO principles in my organization through sending the survey helped me and the district’s leadership team to understand how the organizational resilience was perceived by our staff and administration. The five short audits modified from Weick and Sutcliff (2009) included multiple statements for each respondent to reflect on relative to their view of the organization. The five areas assessed by the audits included: (1) preoccupation with failure, (2) reluctance to simplify, (3) sensitivity to operations, (4) commitment to resilience, and (5) deference to expertise. The surveys were voluntary, completed online, and confidential using the Skylight Survey Matrix System.

The e-mail requesting participation was sent to every certificated staff member and every administrator. Each prospective respondent receiving the email had an
explanation of the questionnaire; its purpose, and specific instructions on how to proceed
to take the survey.

The questionnaire was accessible to prospective respondents most district
employees who were invited participate did so. Specifically 83% of the 30 administrators
in the district and 67% of the 206 teachers responded to the audits. Teachers and staff
responded to the audits with 68 of those respondents being from the secondary level, 63
from the elementary level, and 8 from the special services department where they work at
several sites and different levels. The results were downloaded and placed in an excel
spreadsheet for scoring and analysis.

Collectively, there were 48 items in the audit. Each item was phrased as a
statement about general organizational characteristics. Respondents were given
instructions to read each statement and select the number that best reflected their
conclusion as it related to their school. The audits related to preoccupation with failure,
reluctance to simplify, commitment to resilience, and deference to expertise offered three
possible responses, each having a different point value. The response choices were not at
all (1), to some extent (2), and a great deal (3).

Scoring for items using the 3 point system was done by determining the mean
score for each individual statement. This gave each item a final point value of 1-3. The
average point values were then totaled for each audit. The scoring criteria and ranges for
each audit were adapted from Weick and Sutcliff (2009). The scoring criteria and
definitions are outlined in Table 2.
Table 2

**HRO Audit Scoring Criteria**

<table>
<thead>
<tr>
<th>Total score per item set</th>
<th>Score definition by item set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoccupation with failure</td>
<td></td>
</tr>
<tr>
<td>&gt;20</td>
<td>Healthy preoccupation with failure and a strong capacity for mindfulness.</td>
</tr>
<tr>
<td>12 – 20</td>
<td>Moderate preoccupation with success rather than a mindful preoccupation with failure.</td>
</tr>
<tr>
<td>&lt;12</td>
<td>Preoccupied with success. Need to focus on failure.</td>
</tr>
<tr>
<td>Reluctance to simplify</td>
<td></td>
</tr>
<tr>
<td>&gt;24</td>
<td>Potential to avoid simplification is strong.</td>
</tr>
<tr>
<td>15 – 24</td>
<td>Potential to avoid simplification is moderate.</td>
</tr>
<tr>
<td>&lt;15</td>
<td>Need to improve capabilities to prevent simplification to improve mindfulness.</td>
</tr>
<tr>
<td>Sensitivity to operations</td>
<td></td>
</tr>
<tr>
<td>&gt; Agree</td>
<td>The more the sensitivity to operations.</td>
</tr>
<tr>
<td>Commitment to resilience</td>
<td></td>
</tr>
<tr>
<td>&gt;20</td>
<td>Strong commitment to resilience.</td>
</tr>
<tr>
<td>12 – 20</td>
<td>Moderate commitment to resilience.</td>
</tr>
<tr>
<td>&lt;12</td>
<td>Need to begin building resilience.</td>
</tr>
<tr>
<td>Deference to expertise</td>
<td></td>
</tr>
<tr>
<td>&gt;14</td>
<td>Strong deference to expertise.</td>
</tr>
<tr>
<td>8 – 14</td>
<td>Moderate deference to expertise.</td>
</tr>
<tr>
<td>&lt;8</td>
<td>Need to improve deference to expertise.</td>
</tr>
</tbody>
</table>

The fifth audit was designed to assess the organization’s sensitivity to operations.

This audit gave the respondents the choice of *agree* (1 point) or *disagree* (2 points).
Scoring for this section was done by counting the number of agree and disagree responses. This is also outlined in Table 2 above.

In order to fully understand the personal interests and the goals of the staff and the leadership team, I disaggregated the data by staff and administration. This helped me to understand if there are differing perspectives giving a clearer inventory of our daily practices and to the extent that we incorporate the five principles of mindfulness. Disagreement between administrators and staff can also be a signal of complacency or that something is being overlooked.

In order to understand how organizational resilience was perceived by the staff and administration, I examined the data through the following questions: How much agreement is there between staff and administration? What are we good at? Are we better at anticipation (preoccupation with failure, reluctance to simplify, sensitivity to operations) or are we more mindful at containment (commitment to resilience and deference to expertise). Is there anything in the data that is alarming? Lastly, I determined where we could be more mindful.

The next step of analysis was to determine what processes, strategies, and procedures that could be identified and employed to improve resilience within the district. The statements used in the audits reflect characteristics typical of HROs. The responses provided the mechanism for prioritization where the district should focus efforts to enhance HRO characteristics.

When analyzing the data, the higher the number of responses indicating a statement does not describe the MLSD suggested that a focus on improving this area was
a potential priority for improvement in order to increase the district’s organizational resilience. On the other hand, responses indicating that the statement represents the MLSD, this behavior should be considered one of those where encouragement and continuing support are necessary.

For items using the 1-3 point response format, any statements where 50% of the respondents gave a score of 1, indicating the item does not describe the MLSD, or there was more than 10% differential between the staff and administration, indicating a lack of congruency, these needed to be reviewed for potential high priority focus areas. For items using the agree/disagree format, any item where 50% or fewer of the respondents agreed or there was more than 10% differential between the staff and administration would also be analyzed as a potentially high priority focus area.

Table 3 offers for the Results of the Moses Lake School District HRO Audit using the average scores for each audit for both teachers and administrators. At first glance the overall audit results appear to suggest we are finding success in all five HRO hallmark areas. A healthy preoccupation with failure and a strong capacity for mindfulness would be identified with a score greater than 20. The teachers and the leadership team averaged 21.1 and 21.3 respectively. A strong potential to avoid simplification requires a score greater than 24. 26.2 and 27.2 were the average scores from each group. 74% of the teacher respondents and 79% of the leadership team respondents agree that we are sensitive to operations. A strong commitment to resilience would generate a score greater than 20. The teachers and leadership team averaged 22.3 and 23.5 respectively.
Lastly, a strong deference to expertise would be identified with a score greater than 14. 16.7 and 17.4 were our respective averages.

Table 3

Results of the Moses Lake School District HRO Audit

<table>
<thead>
<tr>
<th>HRO Element</th>
<th>Teacher Avg</th>
<th>Admin. Avg</th>
<th>Score range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoccupation with failure</td>
<td>21.1</td>
<td>21.3</td>
<td>&gt;20</td>
</tr>
<tr>
<td>Reluctance to simplify</td>
<td>26.2</td>
<td>27.2</td>
<td>&gt;24</td>
</tr>
<tr>
<td>Sensitivity to operations</td>
<td>74% agree</td>
<td>79% agree</td>
<td>&gt; Agree</td>
</tr>
<tr>
<td>Commitment to resilience</td>
<td>22.3</td>
<td>23.5</td>
<td>&gt;20</td>
</tr>
<tr>
<td>Deference to expertise</td>
<td>16.7</td>
<td>17.4</td>
<td>&gt;14</td>
</tr>
</tbody>
</table>

With further breakdown of the audit data, the MLSD seemed to have its greatest strength in reluctance to simplify, commitment to resilience, and deference to expertise. These three audits did not have an area that rose to the potentially high priority focus level since in the majority of items there was both congruence between teachers and administrators and the percentage of those who were less agreeable was low compared to other items. I should also mention that for some of these items I also judged the scores given my perspective of the district. Table 4 shows the breakdown of scores on the audit concerned with commitment to resilience. For example, a question on the commitment to resilience audit, “resources are continually devoted to training and retraining people to operate the technical system,” was bothersome to me. As I delved into the 20% of
Table 4

Commitment to Resilience

<table>
<thead>
<tr>
<th></th>
<th>TCHR 1</th>
<th>TCHR 2-3</th>
<th>ADMIN 1</th>
<th>ADMIN 2-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a concern with building people’s competence and response repertoires.</td>
<td>32%</td>
<td>68%</td>
<td>28%</td>
<td>72%</td>
</tr>
<tr>
<td>Resources are continually devoted to training people to operate the technical system.</td>
<td>20%</td>
<td>79%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>This organization encourages challenging “stretch” assignments.</td>
<td>10%</td>
<td>89%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>People have more than enough training and experience for the kind of work they do.</td>
<td>9%</td>
<td>92%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>People have a number of informal contacts that they sometimes use to solve problems.</td>
<td>7%</td>
<td>93%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>People around here are known for their ability to use knowledge in novel ways.</td>
<td>4%</td>
<td>95%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>This organization is actively concerned with developing people’s skills and knowledge.</td>
<td>4%</td>
<td>96%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>People learn from their mistakes.</td>
<td>2%</td>
<td>98%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>People rely on one another.</td>
<td>2%</td>
<td>98%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Most people have the skills to act on the unexpected.</td>
<td>1%</td>
<td>99%</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>
teachers and 4% of the administrators who responded unfavorably to this question, I realized that it was heavily laden with secondary staff.

This reminded me of a conversation had during a K-12 leadership team meeting. The leadership team was responding to the question, “what has to happen to move our system from reactive to aligned and integrated?” I was asking the question relative to the constraints they felt would hinder our ability to move forward with our mission, vision, and core principles. Variability in identifying and using our resources and a historical perspective that secondary and elementary are different was a common theme. When we dug deeper to come to a better understanding of “different”, the secondary leadership team members felt they were “less connected”, “less attention was paid to secondary in the support and training of staff”, and “resources and time were problematic.” To reach a high level of commitment to resilience, as a system, we are going to have to identify strategies to address this issue of secondary support.

The sensitivity to operations audit had two areas of concern (see Table 5). 92% of the teachers and 96% of the administrators disagreed that people have the discretion to resolve unexpected problems as they arise. On the question about access to a variety of resources, 86% of the teachers disagreed and 96% of the administrators disagreed.

The responses on these two questions perplexed me. Earlier, I described the site-based decision making characteristics of our district. Each building is allocated their human and fiscal resources for making decisions that will best meet the needs of their students. Curriculum and professional development decisions are made by teams of professionals but implementation is not optional. As long as buildings are in compliance
Table 5

Sensitivity to Operations

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2-3</td>
<td>1</td>
<td>2-3</td>
</tr>
</tbody>
</table>

People have discretion to resolve unexpected problems as they arise.  

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>92%</td>
<td>4%</td>
<td>96%</td>
</tr>
</tbody>
</table>

We have access to a variety of resources whenever unexpected surprises crop up.

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>13%</td>
<td>86%</td>
<td>4%</td>
<td>96%</td>
</tr>
</tbody>
</table>

Administrators constantly monitor workloads and reduce them when they become excessive.

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>53%</td>
<td>47%</td>
<td>52%</td>
<td>48%</td>
</tr>
</tbody>
</table>

People are familiar with operations beyond their job.

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>58%</td>
<td>42%</td>
<td>64%</td>
<td>36%</td>
</tr>
</tbody>
</table>

People are always looking for feedback about things that aren’t going right.

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>61%</td>
<td>39%</td>
<td>72%</td>
<td>28%</td>
</tr>
</tbody>
</table>

During an average day, people interact often enough to build a clear picture of the current situation.

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>65%</td>
<td>35%</td>
<td>76%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Should problems occur, someone with the authority to act is always accessible to people.

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>82%</td>
<td>18%</td>
<td>88%</td>
<td>12%</td>
</tr>
</tbody>
</table>

On a day-to-day basis, there is always someone who is paying attention to what is happening.

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>88%</td>
<td>12%</td>
<td>96%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Our administrators readily pitch in whenever necessary.

<table>
<thead>
<tr>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%</td>
<td>10%</td>
<td>96%</td>
<td>4%</td>
</tr>
</tbody>
</table>
with grant requirements and implementing our adopted core curriculum, it was my perception that they had the autonomy and authority to respond to problems and access resources. In reviewing transcripts from several interviews, I identified two interview questions that had been asked that were relative to these two questions, “describe the culture of your school district” and “how do you make decisions?”

In describing the culture of our school district, an elementary principal said this, We have a common mission, vision, and core principles. We have clear expectations with trust and relational capacity to do the work. We have energy, enthusiasm and support for the priorities mutually established. This is a positive place to work and I am constantly learning from my colleagues.

This same principal described his decision making process:

It depends what kind of decision needs to be made. When it comes to safety, I analyze the situation and make the decision that is safest for staff and students at that moment. I communicate it with all stakeholders as soon as I’ve made the decision. Decisions relative to things like program implementation, parent involvement, or scheduling, I have a learning improvement team that acts as a liaison with their grade level colleagues. They bring ideas and needs, we work collaboratively to form recommendations and then take them back to the full staff for a vote.

The deference to expertise audit did not have any areas that rose to high priority (see Table 6), however, during a K-12 leadership team meeting, barriers to fail-safe schools were discussed and seniority and binding union contracts were brought up as
**Table 6**

*Deference to Expertise*

<table>
<thead>
<tr>
<th></th>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>People in this school value expertise and experience over seniority.</td>
<td>12%</td>
<td>86%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>In this school, the people most qualified to make decisions make them.</td>
<td>9%</td>
<td>92%</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>People typically “own” a problem until it is resolved.</td>
<td>6%</td>
<td>93%</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>It is easy to obtain expert assistance when something comes up that we don’t know how to handle.</td>
<td>6%</td>
<td>93%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>If something out of the ordinary happens, people know who has the expertise to respond.</td>
<td>3%</td>
<td>97%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>People respect the nature of one another’s professional practice.</td>
<td>2%</td>
<td>98%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>People are committed to doing their work well.</td>
<td>0%</td>
<td>99%</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

potential barriers. While our contract does not establish seniority as the only measure for some of the work we do, it must be considered. This is problem of practice. An example that recently occurred was when a school’s enrollment did not reach the projected number but other schools in the district were over-enrolled compared to their projections.
A teacher needed to be moved. After requesting volunteers, the principal decided that the newest hire (lacking seniority) would be how the staff member would be moved as it was impossible to justify that a brand new teacher had either training or experiences that were the other two factors outlined in the contract for involuntary movement. On one hand, the principal could justify why the new teacher was the best fit for her current assignment, on the other, she saw the language in the contract as a potential barrier.

Reluctance to simplify is a principle of anticipation and the results of the audit are offered on Table 7. One of the statements on this audit is, “skeptics are highly valued.” Only 64% of the administrators and 69% of the teachers responded to this question favorably. This really begged the question of school culture. Reflecting on the culture of our school district question posed in the interviews with select staff members, a principal said,

We have to celebrate the best in people, even when it’s hard. We all have some sense of fear and competition, we have to get beyond it, take the light off of ourselves and instead shine it within us. Celebrating what is right is important.

What does high reliability look like in practice? If we are going to become the school district that we envision through our mission, vision, and core principles, our ability to get there is reliant on implementation of practical steps that are high yield strategies found in high reliability organizations. Levine and Lezotte (1990), found that establishing and maintaining clear goals is the most frequently cited characteristic in school-effects research. Stringfield (1995, 1998) identified the need to have a finite set of
Table 7

Reluctance to Simplify

<table>
<thead>
<tr>
<th></th>
<th>TCHR</th>
<th>TCHR</th>
<th>ADMIN</th>
<th>ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2-3</td>
<td>1</td>
<td>2-3</td>
</tr>
<tr>
<td>Skeptics are highly valued.</td>
<td>31%</td>
<td>69%</td>
<td>32%</td>
<td>64%</td>
</tr>
<tr>
<td>When something unexpected happens, people spend more time</td>
<td>16%</td>
<td>81%</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>analyzing than advocating for their view</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People are not attacked when they report information that</td>
<td>13%</td>
<td>86%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>could interrupt operations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We strive to challenge the status quo.</td>
<td>9%</td>
<td>90%</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>People listen carefully, and it is rare that</td>
<td>9%</td>
<td>90%</td>
<td>12%</td>
<td>88%</td>
</tr>
<tr>
<td>someone’s view goes unheard.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People around here take nothing for granted.</td>
<td>9%</td>
<td>90%</td>
<td>12%</td>
<td>88%</td>
</tr>
<tr>
<td>People generally deepen their analyses to better grasp</td>
<td>8%</td>
<td>91%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>the nature of the problems that arise.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People trust each other.</td>
<td>7%</td>
<td>92%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>People feel free to bring up problems and issues.</td>
<td>7%</td>
<td>92%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>Questioning is encouraged.</td>
<td>7%</td>
<td>93%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>People are encouraged to express different views.</td>
<td>7%</td>
<td>91%</td>
<td>4%</td>
<td>96%</td>
</tr>
<tr>
<td>People show considerable respect for one another.</td>
<td>2%</td>
<td>98%</td>
<td>4%</td>
<td>96%</td>
</tr>
</tbody>
</table>
clear goals shared at all organizational levels and creating a shared belief across the system as a primary characteristic of a high reliability organization. I felt confident in having accomplished that and beginning to see the core principles permeate our system, however, that alone will not get us there. We have to carefully consider the staff and administration’s perceptions of organizational resilience in order to identify, develop, and implement processes, strategies and procedures to improve resilience in the MLSD.

Failure is a catastrophic event and implies that someone didn’t anticipate what and how things could go wrong or something wasn’t caught as soon as it could have been (Weick & Sutcliff, 2009). Our community expects fail-safe schools (Bellamy, 2005) which means that we our system needs to assume the responsibility for the success of each and every child. Failure of any one child means that we did not attend to the weak signals, the data, in a timely manner to implement strategies, practices, or policies that preclude failure. Laporte and Consolini, 1991, talk about the necessity to have early detection and correction of errors. Stringfield, (1995, 1998) identified two conditions or characteristics that schools must put into place to be more HRO-like, 1) An ongoing alertness to surprises or lapses as small failures can cascade into major academic problems and must be monitored carefully, and 2) the building and maintenance of powerful databases that are (a) relevant to core goals, (b) rich in triangulation on key dimensions, (c) real-time available (i.e., before failures cascade), and (d) regularly cross-checked by multiple, concerned groups.

The data on the perceptions of our staff and administration indicated that a weakness in the district’s preoccupation with failure rested in the lack of administrators
seeking out bad news (see Table 8). In the context of student learning, I interpreted this area to determine that we needed a more robust system of identifying and monitoring what we want students to know, understand, and be able to do and to have a data management system that allowed for administrators and teachers to identify failure early and to respond in real-time.

Do you recall the episode of I Love Lucy where Lucy and Ethel are working in the chocolate factory wrapping chocolates on the conveyer belt? Lucy and Ethel were put in a room and told they needed to wrap chocolates. There was no communication about the expectation, how progress would be monitored or to what quality was acceptable. When the manager came into the room and noticed they were finding some success, she sped up the conveyer belt presumably for them to work at a faster pace. As the story goes, Lucy and Ethel start eating chocolates, stuffing them in their clothes, throwing them away so that the next time the manager came in, she would still think they were finding success. With a quick look to the conveyer belt, they appeared to be successful at the faster pace so the manager increased its speed again. There was no communication about what the target was or what constituted success. This example is used here to illustrate that things aren’t always as they seem and that in order to detect errors, we must have clear communication about the goal.
Table 8

Preoccupation with Failure

<table>
<thead>
<tr>
<th></th>
<th>TCHR 1</th>
<th>TCHR 2-3</th>
<th>ADMIN 1</th>
<th>ADMIN 2-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our administrators actively seek out bad news.</td>
<td>61%</td>
<td>37%</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>People are rewarded if they spot potential trouble</td>
<td>35%</td>
<td>63%</td>
<td>12%</td>
<td>84%</td>
</tr>
<tr>
<td>We regard near misses as failures that reveal potential dangers</td>
<td>25%</td>
<td>72%</td>
<td>40%</td>
<td>56%</td>
</tr>
<tr>
<td>rather than as successes that show our capability to avoid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disaster.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you make a mistake it is not held against you.</td>
<td>12%</td>
<td>88%</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>People report significant mistakes even if others do not notice</td>
<td>10%</td>
<td>88%</td>
<td>12%</td>
<td>88%</td>
</tr>
<tr>
<td>that a mistake is made.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We often update our procedures after experiencing a near miss.</td>
<td>9%</td>
<td>90%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>We treat near misses as information about the health of our</td>
<td>5%</td>
<td>92%</td>
<td>4%</td>
<td>96%</td>
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<td>school and try to learn from them.</td>
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<td>People feel free to talk to admin about problems.</td>
<td>6%</td>
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<td>When something unexpected occurs, we try to figure out why our</td>
<td>5%</td>
<td>92%</td>
<td>4%</td>
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<td>expectations were not met.</td>
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<td>We actively look for failure of all sizes and try to understand</td>
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<td>them.</td>
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Developing a Response

A strategy that the district has implemented in order to accomplish early detection includes an opportunity for teams of teachers to meet regularly as professional learning communities. One hour per week has been built into our calendar to compensate all staff to work collaboratively to focus on the continuous cycle of collaboration using four guiding questions.

1. What do we want students to learn?
2. How will we know if the students have learned it?
3. How will we respond when a student experiences difficulty in learning?
4. How will we enrich and extend the learning for those who are proficient?

Using the above four guiding questions specific actions have been developed for each of the audit areas given the data collected and analyzed for this dissertation.

*Preoccupation with Failure*

Creating a system that allows administrators and teachers to identify successes, risk of failure, and to respond in real-time, collaboration time in the MLSD is a time to:

- Determine essential learning outcomes
- Look at student evidence of learning
- Build common formative and/or summative assessments
- Determine activities and strategies that will ensure ALL students meet or exceed standards
- Understand and interpret data
• Create SMART (strategic, measurable, attainable, results-oriented, and time-bound) goals
• Determine intervention for those students who did not learn
• Determine extensions and enrichment for those students who did learn

This strategy allows district staff to identify, diagnose, and treat individual student learning errors in real-time. An example of how this can work: A team of math teachers meeting for their PLC and reviewing student data came to the realization that if they didn’t implement another layer of intervention that a group of twenty-four seniors would not make it to graduation. They brought the information to their principal along with a few strategies that they had brainstormed to help these students acquire the skills and earn their diploma on time. This may have been noticed a few years ago had we had the time and processes in place then. Here we were, in the fall, schedules set and in motion. How do we as a system make this mid-course adjustment before these students fail? Together with their parents, this group of young adults was given two of the options that the math team had brainstormed. All twenty-four seniors took the challenge of adding an after school math session to acquire the necessary skills and earn their diploma on time.

A robust data management system is also being used to record and track student data. Northwest Education Association MAPS assessments in the fall, winter, and spring where we have a standardized measure of student growth over time and the state assessments give us another opportunity to understand where errors may be occurring. The data warehouse system allows teachers and administrators to drill down to the strand level to monitor areas of strength and weaknesses for students.
Reluctance to Simplify

The reluctance to simplify audit provided for a look at how or if our organization takes nothing for granted. Mindfulness with attention to contexts helps to ensure differentiated viewpoints are used. School systems are highly complex systems. Hoy, Gage, and Tarter (2006) elaborate on the need for schools to simplify less and “see” more. The perception data collected indicates that strengths lie within the relationships of the MLSD staff. Respect and trust were two highly yielded cultural characteristics that will allow for the “digging deeper” work to occur. The area of growth for the district is in valuing skeptics. Relative to our work in this area is an opportunity to understand multiple perspectives and to dig deeper to understand below the surface. Progress monitoring and implementation of a response to intervention model requires us to utilize data and do on-going analysis until we find the cause of the errors in learning and make the real time adjustments. Differing viewpoints come to the table to discuss what we know about our curriculum, instructional strategies, and the learner.

In the response to intervention model, school teams are to use data to identify students at risk of failing. They will use diagnostic assessments to identify the misconceptions or errors in learning, provide interventions and monitor the response to those interventions and the student’s growth. The district will use the RTI model for academic achievement monitoring but also use the positive behavior intervention supports (PBIS) as the RTI model for student behavior.

We need to be more mindful in the team processes to hear all viewpoints, consider the data impacts of the interventions already employed for a particular student,
and consider options that have not yet been tried. The robust data warehouse system should help to ensure that interventions are selected based on the diagnostic data and not on our old method of giving all children the same treatment plan regardless of their diagnosis.

Sensitivity to Operations

Relationships and continuous conversations are essential in handling risks (Weick & Sutcliffe, 2007). HRO’s make adjustments along the way, not sitting idle until the catastrophe occurs to respond. Being sensitive to operations is a strategy to correct failures before they happen. Hoy et al. (2006) indicates that the principle of sensitivity to operations means staying close to the core function of your organization. Our organizations’ core function is teaching and learning. Bellamy et al. (2005) discusses being sensitive to operations in schools means having standard operating procedures in key areas such as instructional materials, professional development, and data systems.

Sensitivity to operations provides for the largest growth area for the Moses Lake School District. Having the discretion to resolve unexpected problems as they arise and having resources to deal with the unexpected were two areas in the audit that were concerning. Given our site based decision-making and site based budgeting processes, this data conflicted with what I thought our practice was. As I delved into journals and interview data, I came to understand that there is a discrepancy between the standardization and supports available for elementary as compared to secondary. As an example, in the K-5 principals meeting recently, the team had a presentation from the elementary math coach on “look fors” in an elementary math lesson that espoused the
guaranteed and viable curriculum we expect to be taught. Not only have we identified and trained every elementary teacher on the curriculum and instructional strategies but we have also provided supports such as instructional coaches and principals who are highly trained to recognize and support the key elements of a highly effective lesson. As an elementary principal, I have a tip sheet ready for my classroom walk throughs that outline the amount of time I should expect to see spent on the different areas of the lesson, what I should expect in the investigation, what sharing and summarizing should look like in a math lesson and what I should expect to see in application and differentiation.

In order to reduce the variability, we are working to implement strategies and systems of support that will reduce the differences between elementary and secondary. We have defined outcomes for PLC time that is scheduled weekly, yet celebrate that each team may be in a different place on the continuum of implementation. Continuous and systematic processes that are now converging into the secondary (like the elementary) include:

- Pacing calendars
- Essential Learnings / Power Standards / Unit Focus
- Curriculum Alignment (content, vertical)
- Unit Planning / Lesson Planning
- Assessments (Formative, CBAs)
- Scoring/Analyzing Assessments
- SMART Goals
Hiring processes is another area where we are demonstrating sensitivity to operations. Stringfield (1995, 1998) identified three HRO-like characteristics necessary for schools relative to hiring and retention. They include: extensive recruiting, serious performance evaluations, and targeted training and retraining.

We have revised our screening and interview practices so that only quality candidates who will embrace our core principles as a district are hired, retained, and invested in. All new staff will receive extensive training and support at the elementary level. We are working to duplicate the support system for our secondary staff. Crucial conversations where warranted with serious and honest performance evaluations are also becoming the norm.

Commitment to Resilience

Making mid-course adjustments before failure occurs is central to an HRO. Being able to diagnose and apply interventions before failure occurs is as important as bouncing back from errors using strategies for coping in order to continue operations. This requires technical competence, ongoing training, flexible decision-making authority, and the rewarding of error reporting (Frederickson & Laporte, 2002, p. 34). Two areas of opportunity in the MLSD as identified in the audits are the opportunity to build peoples competence and devoting resources to training and retraining. During a conversation with a group of secondary teachers about the implementation of a common language of instruction, which is a district goal, a teacher said, “Sometimes adults would rather be competent at the wrong things than incompetent learning new things.”

Our leadership team made a commitment and a concerted effort to outline our
priorities as a school district. Those priorities include the development and support of highly effective PLCs and implementation of a consistent language of instruction.

For each of these goals, we developed a plan of action with training and support. To move from PLCs to highly effective PLCs, the leadership team participated in a Leaders of Learners book study, we identified a cadre of teacher leaders who are taking this year to build their cycle of collaboration skills by attending training and taking a second opportunity to entrench themselves in Learning By doing so they can come along side their peers for collaboration support, and lastly, we have system-wide training planned that will take every staff member through the entire cycle of a PLC with learning and application intertwined throughout the year. This positions us for the cadre of teacher leaders to continue that support over the next three years.

The commitment to resilience and our ability to make mid-course adjustments was evident in our second goal, implementation of a common language of instruction. When we set that goal, we created an action plan that included a team of administrators developing our own language and formulating a “roll-out” plan. As the Washington State legislature moved to adoption of the common core standards and a new teacher principal evaluation system (TPEP) that would require districts to choose one of three approved frameworks for instruction, we stepped back and aligned our goal and implementation timeline with the expectations being set legislatively. This mid-course adjustment has enabled us to layer the common core, TPEP, and PLC work and yet meet our original goal of a common language of instruction.

We have systems of support that include teacher leaders, instructional coaches,
and job embedded professional development that are both mandatory and optional. We have also developed a two-year mentoring program for new teachers, implemented national board support, and have a plethora of optional courses we offer tied to our district goals and with no-cost clock hours. On one hand, it seems that we are training and supporting staff at every turn, however, a deeper look at the audit and my journals clearly show that we do a better job of supporting elementary and secondary staff do not feel supported.

I reviewed two years of calendars of staff training so that I could better understand the needs we still have for training and building competence. I found a great deal of support for secondary but it was all related to the implementation of a college readiness system, Advancement Via Individual Determination (AVID). We have done all kinds of training and attendance at conferences for AVID for hundreds of secondary staff. We also did large scale PLC training for secondary. In the last several years, however, we have not focused any secondary training on instructional content or pedagogy as we have with the elementary. A secondary principal said, “We want to be more alike than different. We recognize there is a readiness to benefit but the shift to common core is a perfect time to make a change.”

Deference to Expertise

Decisions in HRO’s must be made closest to where the problem originates. Seniority and position should not always drive decision-making. Leithwood (1994) said that distributing the responsibility and power for leadership widely through the school is necessary.
Site based decision making continues to be a strategy the MLSD implements to empower highly skilled educators and trained professionals to be making decisions closest to the forefront. The district allocates a budget based on enrollment FTE and the building principal develops a site process to implement program and to support the needs of their students. Teams of teachers and administrators work together to make decisions on non-negotiables such as curriculum adoptions.

The dynamic process of teamwork means that the designation of who is knowledgeable and show have decision making input or authority changes based on the decision or activity at hand. As a system, we need to ensure that the teams who are given the responsibility to identify solutions also have the authority and support for implementation.

As an example, the TPEP will require some local decision-making. We also know that there are contractual implications for both our teachers and our principals. In order to ensure that we have a team that represents all interests and areas of expertise, a committee was assembled to work on the training, support, and locally controlled items specific to the TPEP. A memorandum of understanding was established with each association that delegates the responsibility and the authority to this joint team. We are working collaboratively to resolve issues and needs that impact all of us.
CHAPTER FOUR
SIGNIFICANCE AND REFLECTION

The purpose of this action research was to identify, assess, and improve the resilient practices in the district. Specifically, the dissertation was action research carried out by the district’s leadership team to implement an improvement process that supports best practices that promise in return higher levels of student achievement as outlined in educational policy. This study sought to identify (a) how is organizational resilience perceived by the faculty, staff, and administration in the district as measured by the resilient performance audits and qualitative data gathered through interview and observation, and (b) what processes, strategies, and procedures can be identified and employed to improve resilience within the district. The findings of this study have practical and substantive significance. After I discuss both of these areas of significance I share some personal reflections given the study and my learning about leadership for resilience.

Practical Significance

When values, culture, and expectations are converted into norms for behavior that are less prone to error, the organization will find reliability. This study was about advancing such agenda in the Moses Lake School District.

If you think you are leading but turn to discover there is no one behind you then you are probably just out taking a lonely walk. Leadership begins with helping others to see the top of the puzzle box. Leithwood (1994) expanded on Bass’s tenants of effective
leadership to include individual consideration, intellectual stimulation, inspirational motivation, and idealized influence. As Bjork and Gurley (2005) reported, leaders must provide for the vision of the stakeholders. In order to be effective, Heifetz and Linsky (2002) detail the need for leaders to be able to respond to what is happening and must discern how it connects and relates to the community at large and to the school community.

As a result of this study, I found that leadership in our district needed to make some shifts in practice if we were going to pursue becoming an HRO. Through interviews and discussions with the leadership team, I found that we had internal practices that created unhealthy competition and we were really celebrating mediocrity. Even though the audit data showed that our system had many strong HRO characteristics in practice, our conversations together would indicate that we were addressing problems as they arose but not the symptoms.

A common problem of practice that was encountered in our district was that the district office administrators were working hard to “protect” the time and talent of the building leaders and in doing so, were becoming the soul source of accountability. In a leadership team meeting, a vice principal said,

You know, each of us are so emotionally invested in our own schools, we aren’t ever asked to look outside of our own walls. If we are going to move forward as a team, you need to quit treating us like we are fragile and expect us to lead. You can help us by asking the right questions at the right time and supporting us with implementing the changes.
Specific changes in what we did as a leadership team were able to occur because of the honesty. We scheduled more frequent meetings where we could be together to work on the planning, implementation, and monitoring of the district improvement plan. I now expect the team to think through things as part of the system. We are working as a team to reduce variability across the system and have improved lines of communication. We also changed the “what” we do during our time together. As an example, here is a copy of a meeting agenda prior to implementing this change:

K-12 Principals Agenda

Personnel
Custodial
Budget
Rapid responder
Title 1/LAP
Special Ed
Tech
C& I

As compared to our time together now:

K – 12 Leadership Team Agenda

Review Norms
Core Instruction Conversation: Common Core transition
Highly Effective PLC’s
Share examples of responses to PLC minutes. Bring minutes from a Highly effective team and one that you find challenging to get past the First step in the cycle

Clearly, our time together has shifted from the nuts and bolts, managerial functions to the instructional leadership and we are learning from each other on how to improve our craft. We are also continuously taking the temperature of our organizations leadership and making adjustments to prevent future errors or enlarging existing ones.

As we are becoming more mindful to failure, we have sharpened our pencil and honed in on just a few key goals that have been co-developed with many stakeholders. We have also become very clear about our non-negotiables, the core principles, which include targets for student achievement and adult learning. We are developing a tighter coupling for secondary curriculum and instruction and are standardizing operating procedures relative to instructional practice that includes common core alignment, pacing guides, and common assessments. Lastly, we are working to change our system to align the responsibility with the authority and resources.

Some implications for doing this type of action research as an insider have been realized by this researcher:

- Patience is a virtue. We must Recognize that we are a work in progress and that resistance really means that we need to ask more questions and seek to have a better understanding of what the risks are to the stakeholders who are resisting.

- Relational capacity and trust are critical. Communication includes listening.
• Resources, both human and fiscal, as well as time cannot become excuses for not doing what is right for all students.

• Acceptance that we don’t have all the answers and relying on others to grow our repertoire of knowledge, skill, and attitudes is necessary.

• If you are asking the questions, you have to be willing to confront the issues as they are unveiled.

I believe that this study lays the foundation for continued learning for our organization and others. Regardless of the laws that might drive the urgency for reform, (NCLB, AYP, Race to the Top, etc.) we have a moral and ethical responsibility to achieve high reliability for all children regardless of race, language, ethnicity, or disability. Schools do not have a fundamental choice on whether or not they pursue reliability, the question is what processes, strategies and procedures fit your complex school system to increase educational reliability. We are a work in progress and will continue to work toward implementing HRO characteristics as a high yield strategy for improved student learning.

Substantive Significance

Every school district in America should be concerned with increased reliability and the demand for error free school systems. Mindfulness enables school leaders to implement cognitive processes that not only help identify errors but also to respond to them. Examining the practice of a district leadership team’s implementation of processes, strategies and procedures to improve resilience can provide insight to
administrators across the country, potentially impacting reliability and higher levels of student achievement for thousands of students.

The information from this study could also be used to provide for effective administrator training, sharing organizational practices and processes that improve an organizations resiliency.

Further research is needed to more fully explore how the processes, strategies, and procedures implemented advanced the agenda of improving resilience.

*Critical Reflection*

School systems are such complex systems. After eliciting data, an extensive literature analysis, and increasing my intentionality to understand the intersection of leadership and HROs, I have really come to understand the tensions that I face in my role as a school system leader. Reflecting back on the questions I had as I considered acceptance of the superintendent position: Are we ready to talk about failure? Can we be sensitive to operations and ready to make continuous adjustments to prevent future errors or enlarging existing errors? Are we committed to resilience? Are we willing to make mid-course adjustments when problems occur? Are we willing and able to take a variety of extraordinary steps in pursuit of error free performance? I realized that none of these conversations are possible unless I am willing and able to put processes in place where the questions can be asked and stakeholders are included in the response as well as the planning, implementation, and evaluation of those decisions. Everything that we do must not only align with HRO characteristics but must also have a sustainability plan. Simply checking it off the list will not produce any more reliable results than what we were
getting previously. Crucial conversations are necessary to ensure that everyone on our team is committed to this work and not just complying.

The literature review of the early definitions and work expectations of superintendents included planning and evaluation; organization; management of personnel, business, buildings, and auxiliary services; provisions of information and advice to the community; and coordination of the entire school system (AASA, 2003). The tensions that I experience on a day-to-day basis are balancing these responsibilities along with the instructional leadership Grogan and Sherman (2003) speak of.

In the meeting agenda example I shared with you, you can see a shift to the teaching and learning domain. This has been a positive shift for our leadership team and many of them have expressed their appreciation for developing a process whereby supporting each other’s learning is part of our culture. We have absolutely prioritized the sharing of knowledge, interdependence, and a deep-rooted belief that our kids deserve our collective best. This shift has also helped me to stay connected to the frontline, the classroom. As our leadership team engages in teaching and learning conversations, I am also growing my skills to better communicate and support the classroom teacher. It does matter to them that I am visible in their buildings and stay “in-tune” with what they are experiencing in delivering the standards to students with a variety of needs. Being able to ask them questions relative to their curriculum or instructional strategies reinforces that relationship.

As the leadership team recently wrapped up a book study on, Leaders of Learners, I was again reminded of Datnow and Stringfield’s (2000) assertion that school change is
an active process that involves just as much changing of the hearts and minds as it does policies and procedures. For leaders, we also must appeal to the head and the heart of our staff. Relationships continue to be a high priority for me and developing healthy working relationships with staff is an expectation I have for the leadership team.

How is it that we can feel like we are on the right track and when you do a mid-course check, find that we’ve created other problems for our system with the implementation of the very things that were moving us towards higher reliability? The leadership team recently went through a mid-course check responding to three questions: 1) What makes the Moses Lake School District a good place to learn and work? 2) What is important for a leader to know in our district? 3) What can we collectively do to improve our reliability and decrease our variability? The responses were very positive and gave us an authentic reason to celebrate...which we did. But the third question drew responses that were very surprising. The leadership team wants to decrease variability and have more time spent on the “management” things relative to their roles and responsibilities. They requested monthly check-off lists of things that need to be completed and more time to discuss things like custody issues and emergency preparedness.

As I left that meeting, I reflected on the swinging pendulum. We had swung too far away from the day-to-day management support necessary in our schools and system to a complete focus on the curriculum and instruction responsibilities. We are working on a mid-course adjustment to respond to this need, paying very close attention to the HRO characteristics and the development of standard operating procedures.
There is no question; we are in some extraordinary times in public education and as a country. We will be challenged and pressed to the limits of our ability, skills and energy; however, I am confident that these challenges bring us new opportunities to re-invent ourselves as a system and work collectively to meet the needs of our most precious asset, our children.

There are many lessons to be learned from HROs. I think we are on the right journey and have increased our mindfulness and willingness to make mid-course corrections before failure occurs. Further research is needed to more fully explore how the processes, strategies, and procedures implemented advanced the agenda of improving resilience.
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Appendix A

Resilient Organizing Initial Winter Contact Letter

Dear {{pool:title}},

Here is the message from me, Michelle Price, inviting you to answer a series of questions about the resiliency of the Moses Lake School District. Thank you in advance for taking time from your busy day to provide your opinion. As a member of the Moses Lake School District’s faculty and staff, your views matter on how we operate and work together creating the best teaching and learning environment. The individual responses from these tools will be aggregated to identify areas where we as a school district are doing well and those with opportunity for growth. There are five tools that will each take about 2 minutes to complete.

You can click on the link below or copy and paste it into your Internet browser {{surveyurl}}. All information you provide will be treated confidentially. Your name will not be matched with your response. The data manager is using a unique identification number for data management purposes. Your participation is entirely voluntary and you may refuse to answer any question or discontinue participation at any point. There is no personal risk to you. Should you have questions or comments, please feel free to contact me at mprice@mlsd.wednet.edu. This project was qualified as exempt by the Institutional Review Board at Washington State University (WSU).

Sincerely,

Michelle Price
Appendix B

Resilient Organizing Second Letters

Dear {{pool:title}},

I just want to thank those of you who have responded to the online tools about your school district’s resiliency. Please, if you haven’t done so, use the link and answer the questions. I need your opinion for valid results. It only takes about 10 minutes. I know each of you cares about this school district and the work that you do here on behalf of students. Resiliency is about the ability to handle challenges that get in the way of success. Your views matter on how we are performing.

You can click on the link below or copy and paste it into your Internet browser {{surveyurl}}. All information you provide will be treated confidentially. Your name will not be matched with your response. The data manager is using a unique identification number for data management purposes. Your participation is entirely voluntary and you may refuse to answer any question or discontinue participation at any point. There is no personal risk to you. Should you have questions or comments, please feel free to contact me at mprice@mlsd.wednet.edu. This project was qualified as exempt by the Institutional Review Board at Washington State University (WSU).

Sincerely,

Michelle Price
Appendix C

Preoccupation with Failure

How do the following statements describe your school? For each item, circle the number that best reflects your conclusion: 1= not at all, 2= to some extent, 3= a great deal.

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<tr>
<td>1. We actively look for failure of all sizes and try to understand them.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. When something unexpected occurs, we always try to figure out why our expectations were not met.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. We treat near misses as information about the health of our school and try to learn from them.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. We regard near misses as failures that reveal potential dangers rather than as successes that show our capability to avoid disaster.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>5. We often update our procedures after experiencing a near miss.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>6. If you make a mistake it is not held against you.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>7. People report significant mistakes even if others do not notice that a mistake is made.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>8. Our administrators actively seek out bad news.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9. People feel free to talk to administrators about problems.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>10. People are rewarded if they spot potential trouble spots.</td>
<td>1</td>
<td>2</td>
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Appendix D

Reluctance to Simplify

How do the following statements describe your school? For each item, circle the number that best reflects your conclusion: 1= not at all, 2= to some extent, 3= a great deal.

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<tbody>
<tr>
<td>1</td>
<td>People around here take nothing for granted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Questioning is encouraged.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>We strive to challenge the status quo.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>4</td>
<td>People feel free to bring up problems and tough issues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>5</td>
<td>People generally deepen their analyses to better grasp the nature of the problems that arise.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>6</td>
<td>People are encouraged to express different views.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>7</td>
<td>People listen carefully, and it is rare that someone’s view goes unheard.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>8</td>
<td>People are not attacked when they report information that could interrupt operations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>9</td>
<td>When something unexpected happens, people spend more time analyzing than advocating for their view.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>10</td>
<td>Skeptics are highly valued.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>11</td>
<td>People trust each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>People show considerable respect for one another.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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Appendix E

Sensitivity to Operations

Indicate whether you agree or disagree with each of the following statements about your school.

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<tr>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>On a day-to-day basis, there is always someone who is paying attention to what is happening.</td>
<td>Agree</td>
</tr>
<tr>
<td>2.</td>
<td>Should problems occur, someone with the authority to act is always accessible to people on the front lines.</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>Our administrators readily pitch in whenever necessary.</td>
<td>Agree</td>
</tr>
<tr>
<td>4.</td>
<td>People have discretion to resolve unexpected problems as they arise.</td>
<td>Agree</td>
</tr>
<tr>
<td>5.</td>
<td>During an average day, people interact often enough to build a clear picture of the current situation.</td>
<td>Agree</td>
</tr>
<tr>
<td>6.</td>
<td>People are always looking for feedback about things that aren’t going right.</td>
<td>Agree</td>
</tr>
<tr>
<td>7.</td>
<td>People are familiar with operations beyond their own job.</td>
<td>Agree</td>
</tr>
<tr>
<td>8.</td>
<td>We have access to a variety of resources whenever unexpected surprises crop up.</td>
<td>Agree</td>
</tr>
<tr>
<td>9.</td>
<td>Administrators constantly monitor workloads and reduce them when they become excessive.</td>
<td>Agree</td>
</tr>
</tbody>
</table>
Appendix F

Commitment to Resilience

How do the following statements describe your school? For each item, circle the number that best reflects your conclusion: 1= not at all, 2= to some extent, 3= a great deal

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<thead>
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<tbody>
<tr>
<td>1</td>
<td>Resources are continually devoted to training and retraining people to operate the technical system.</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>People have more than enough training and experience for the kind of work they do.</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>This organization is actively concerned with developing people’s skills and knowledge.</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>This organization encourages challenging “stretch” assignments.</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>People around here are known for their ability to use their knowledge in novel ways.</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>There is a concern with building people’s competence and response repertoires.</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>People have a number of informal contacts that they sometimes use to solve problems.</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>People learn from their mistakes.</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>People rely on one another.</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Most people have the skills to act on the unexpected problems that arise.</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix G

Deference to Expertise

How do the following statements describe your school? For each item, circle the number that best reflects your conclusion: 1= not at all, 2= to some extent, 3= a great deal

<p>| | | | | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>People are committed to doing their work well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>People respect the nature of one another’s professional practice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>If something out of the ordinary happens, people know who has the expertise to respond.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>People in this school value expertise and experience over seniority.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>In this school, the people most qualified to make decisions make them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>People typically “own” a problem until it is resolved.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>It is generally easy to obtain expert assistance when something comes up that we don’t know how to handle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix H

Interview Protocol:

Background information:

1. Tell me about yourself and your journey to become a school leader.
2. What words best describe your school district?
3. What are your challenges when describing your position?
4. Describe the culture of your school district.
5. How do you balance your professional life and your personal life?
6. What aspects of your current job provide you the most satisfaction?
7. What aspects of your current job provide you with the most stress?
8. How do you involve others in leadership responsibilities?
9. Describe how trust is built within your school district.

Mindfulness:

10. Tell me about your communication style.
11. How do you handle conflict within your district?
12. Tell me about the shared beliefs and expectations in your district.
13. Under what circumstances does your staff resist change?
14. Under what conditions in your school district does change occur?
15. How do you make decisions?
16. Who do you go to for advice when you don’t know how to do something?
17. How do you create organizational routines? How do you maintain these routines?
18. How do you buffer district mandates from your staff?
19. How do you bridge district mandates with your staff?
20. How do you balance mindfulness with the sense of urgency?
21. Explain to what extent you believe that educators engage in mindlessness behaviors.
22. Is there an area that you would like to be more mindful going forward and how do you anticipate building a mindful infrastructure as a school leader?

Resiliency:

23. Explain the most challenging decision you have made as a school/district leader that did not “sit well” with you. How do you overcome that feeling when you question your own decision?
24. How do you respond when you know “trouble” is coming?
25. How does your staff react to pressure or intensity?
26. Do you worry about mistakes that you make with the staff? How do you engage in conversation with staff when you make mistakes?
27. How do you motivate people who show compliance without commitment?
28. How do you create a culture where staff is comfortable reporting errors?
29. How do you use reflection?
30. How is professional development implemented & supported in your district?
Appendix I

Observation Protocol

1. Description of the school (physical environment). The staff. The students
2. Student behavior in halls, at lunch, in classes
3. Staff members communication with students
4. Staff members communication with administration
5. Relationship with school and community
6. How do administrators distribute leadership?
7. How is the mission, vision, and core principles evident in the school culture?