UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

MAINTAINING A STABLE, SAFE LEARNING ENVIRONMENT: INTER-ORGANIZATIONAL COLLABORATION AND THE PERCEPTION OF RISK

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

In partial fulfillment of the requirements for the

Degree of

Doctor of Philosophy

By

KATHY L. WILLIAMS Norman, Oklahoma 2007 UMI Number: 3263196

Copyright 2007 by Williams, Kathy L.

All rights reserved.



UMI Microform 3263196

Copyright 2007 by ProQuest Information and Learning Company.
All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company 300 North Zeeb Road P.O. Box 1346 Ann Arbor, MI 48106-1346

MAINTAINING A STABLE, SAFE LEARNING ENVIRONMENT: INTER-ORGANIZATIONAL COLLABORATION AND THE PERCEPTION OF RISK

A DISSERTATION APPROVED FOR INTERDISCIPLINARY STUDIES

BY

Henry D. O'Hair, Chair
Joseph Lee Rodgers
George Henderson
Gary E. Holmes
Young Yun Kim

ACKNOWLEDGEMENTS

This study was completed with the guidance and support of my committee members, and of my husband. I am grateful for each of their individual contributions.

To Dr. Dan O'Hair, Committee Chair, who guided me in the refinement of the topic, and who shared with me his work related to Risk Communication. His assistance throughout this project was invaluable.

To Dr. George Henderson, Dr. Gary Holmes, Dr. Joe Rodgers, and Dr. Yun Young Kim, who supported me throughout the process. Each one provided needed feedback during the initial phase, as well as the final draft. Their suggestions and comments were greatly appreciated.

To Tom, my husband, for his never ending support and encouragement over the past thirty-five years. Our mutual love and respect for each other has created continued success and happiness in our lives. Thank you.

TABLE OF CONTENTS

							Page
Acknowledgements							iv
List of Tables							X
Abstract			•				xi
Dedication							xiv
Chapter I:						•	1
Statement of the Problem .							3
Risk To School Environment	t.						8
School Safety and Security F	Planning	g Proces	s.	•			9
Purpose of the Study . Rationale .	· ·					·	12 12
Research Questions							13
Methodology				•	•		14
Assumptions							14
Limitations of the Study				•	•		15
Definition of Terms .				•	•		16
Organization of the Study .				•	•		18
Summary				•	•		19
Chapter II: Literature Review .							20
Overview							20
The Need for the School Safe Natural Disasters . School Violence . Influenza Pandemic .					•		22 23 24 25

Terrorism		•			•	27
Bioterrorism						28
Posttraumatic Stress Disorde	er.			•		28
I coming Oppositetion						21
Learning Organization	•	•	•	•	•	31
Nominalist Position	•	•	•	•	•	34
Systems Thinking	•		•	•	•	35
Constructs	•	•	•	•	•	37
Inter-Organizational Collaboration						37
Environmental Scanning.						39
Conceptual Framework for l					·	41
Environmental Scanning Co				_	•	42
						43
		•				45
Inter-Organizational Domain						_
Understanding Power.						46
Spanning For Information .	•	•	•	•	•	46
Risk Perception	•		•			49
Cognitive Theories .	٠					49
Social Amplification of Risk	ζ.			•		50
Cultural Theory						51
Cultural Theory . Social Amplification of Risk	k Frame	work .	•		•	53
Measuring the Perception of Risk.						54
The Development Study/Dev	radiam	•	•	•	•	54
The Psychometric Study/Par	radigiii .	n i Diala	•	•	•	
The Epistemological Percep	tion of i	KISK .	•	•	•	56
The School Safety and Security Pla	nning P	rocess.	•		·	58
Risk-Benefit Balancing.	•	•	•	•	•	66
Modeling the School Safety and Sec	curity P	lanning	Proces	S		61
Research Matrix .	•	_	11000		·	63
Research Matrix .	•	•	•		•	0.2
-				•		65
Learning Organization-System	emic Ap	proach		•	•	65
Research Question 1	•					65
Inter-Organizational Collabo			•	•		65
Research Question 2	•					66
Research Question 3		•	•			67
Risk Perception						67
-					•	67
Geographic Variation .					•	67
		•			•	68
Research Question 3	•	•	•	•	•	Uč
Summary						68

Chapter III: Methodology	•	•	•	•	•	•	71
Research Context							71
Validity and Reliability.	•				•	•	72
The Research Participants Sample and Setting							74 74
Instruments for Data Colle	ction.				·		76
Research Methods	•	•			•		78
Procedures		•					79
Pilot Study		•	•		•		81
Timeframe	•		•	•	•	•	81
Treatment of the Data.							82
Summary							83
Chapter IV: Results							85
School Safety and Security	Planni	ng Proc	ess .				85
A Minimal Process					•		86
An Evolving Proces			•	•			88
An Exemplary Proc			•			•	90
Patterns Among the Cases	for the	School	Safety a	and Sec	urity Pr	ocess	93
Frequency Distribu	tion and	l Percei	ntages			•	93
Geographic Location			_			•	94
Risk Perception Surveys.							94
Frequency Distribu	tion and	l Percei	ntages		•		94
Aggregation of Dat						•	94
Geographic Location						•	96
Research Questions							97
Research Questions	: 1 .					•	97
Research Questions	2.					•	99
Research Questions							101
Research Questions							104
Research Questions							107
Summary							111

Chapter V: Disc	ussion .	•		•	•	•	•	•	112
Summar	y of the Fin	dings .							112
Conclusi	ons	•	•			•	•	•	113
Significa	nce of the	Study .							115
Implicati	ons of the s	Study .	·	•		٠	•	٠	116 116
I	earning Or	ganizati	on-Sys	· stemic Δ	nnroae	· ·h	•	•	116
I _t	nter-Organi	zational	l Colla	horation	pproac		•	•	117
	isk Percept						•	•	120
	ural vs. Ur		•		•	•	•	•	122
	nplication:		tice		•	•	•	•	123
11	присанон	ioi i iac	ticc	•	•	•	•	•	123
Limitatio	ons of the S	tudy .							127
Future R	esearch								129
Summar	у						•		131
References .							•		133
Appendices .									152
Appendi	х A .								153
Appendi	хВ.								154
Appendi	x C .								155
Appendi	хD.								160
Appendi	xЕ.								162
Appendi	xF.								166
Appendi	хG.								219

LIST OF TABLES

Table 1:	Yoe's (2006, p. 373) Nine Themes of Organizational Learning	
	and Learning Organization	33
Table 2:	Overall Average Percentages for the Categories of Minimal	
	Process, Evolving Process, and Exemplary Process for All Sites .	93
Table 3:	Overall Average Percentages for the Categories of Minimal	
	Process, Evolving Process, and Exemplary Process for Public Rural,	
	Public Urban, Non Public Rural, and Non Public Urban .	94
Table 4:	Aggregated Percentages and Frequency Distribution Indicating	
	Respondent Perceptions for Risk as Related to Extreme Concern,	
	Too Risky to be Acceptable, and Presently Acceptable $(N = 55)$.	95
Table 5:	Percentages and Frequency Distribution of Risks for Educational	
	Leaders Compared by Geographic Location and Extreme Concern,	
	Too Risky to be Acceptable, and Presently Acceptable $(N = 55)$.	96

ABSTRACT

THE STUDY OF

MAINTAINING A STABLE, SAFE LEARNING ENVIRONMENT: INTER-ORGANIZATIONAL COLLABORATION AND THE PERCEPTION OF RISK

The school safety and security planning process is important because it directs the educational organization's ability to maintain a stable safe learning environment. For this study, continuous comparison of data and theory, and a cross-case analysis generated a grounded theory. This theory stated that: When the educational leader's perception of risk was malleable and well developed, the school safety and security planning process was more comprehensive. Enhancement occurred with the establishment of a systemic approach, and through inter-organizational collaboration with community stakeholders. These stakeholders included, but were not limited to, the departments of public health, mental health, medical care, emergency management, law enforcement, fire, homeland security, and transportation ("Journal of School Health," 2004).

The purpose of this study was to analyze the school safety and security planning process. Sixty-two public school districts and non public schools within a fifty-mile radius of a large metropolitan area, located within the four states area of Texas, Oklahoma, Arkansas, and Kansas, were carefully studied to answer the following questions: How is the school safety and security planning process enhanced when educational organizations utilize a systemic approach? Why is the school safety and security planning process less comprehensive when educational organizations limit explorations to internal networks? Why is the school safety and security planning process more comprehensive when educational leaders utilizes inter-organizational collaboration?

What is the relationship between educational leaders' perceptions of risk and the school safety and security planning process? What are the dimensions distinguishing rural and urban public school districts' and non public schools' safety and security planning process?

A qualitative/mixed-methods study was designed to study the phenomenon. The methodological approach was a case study, including sixty-two sites, and three pilot sites. Data collection included: document analysis, interviews, surveys, and demographic information. Data analysis entailed constant development and verification of hypotheses about relationships among categories from the collected data from each site using coding, emerging categories, data reduction, and interpretation.

This study revealed that 35% (22) public school districts and non public schools had a minimal school safety and security planning process, 44% (27) had an evolving process, and 21% (13) had an exemplary process. It displayed that the public school districts and non public schools that established safety and security as 'part of the system' (Systemic Approach) had an evolving or exemplary process. It determined that public school districts and non public schools that utilized environmental scanning and boundary spanning (Inter-organizational Collaboration) enhanced their school safety and security planning process. It also revealed that if the educational leaders' perception of risk was well developed the school safety and security planning process was more comprehensive. Lastly, the study determined that location may have an influence on the school safety and security planning process. However, public vs. non public, school affiliation, available monies, community support, and other factors may be as influential.

The significance of this study was that the findings confirmed similar conclusions from past and present research on the theories of the systemic approach dynamic of learning organization, inter-organizational collaboration, and risk perception. This agreement was indicated by the enhanced of the process. The usage or non usage of a systemic approach and inter-organizational collaboration confirmed that the process can be enhanced by these strategies. The study also indicated that an educational leader's whose perception of risk that was well developed, and influenced by experts' vital information, created a more all-inclusive school safety and security planning process.

The results from this study can be utilized by educational leaders to expand their knowledge of the theories of learning organization, inter-organizational collaboration, and risk perception. The results can also be used as a baseline to determine the comprehensiveness of their current school safety and security planning process. Findings from this study can be expanded on in future studies by delving into such topics as: the school safety and security planning process in other locations throughout the United States; the community safety and security planning process; risk perceptions of community stakeholders, parents, students, and all school employees; and compelling influential events that may effect the process.

DEDICATION

This body of work is dedicated to Andrew and Emily, my son and daughter.

Through the completion of this study, I hope to have modeled a true commitment to lifelong learning, and presented a challenge for the future.

CHAPTER I

Creating and maintaining a stable, safe learning environment is a primary concern for school communities across the United States. The fear of natural disaster, terrorism, acts of violence (i.e., shootings, drug overdoses, and suicides), pandemics, and other risk situations have increased dramatically in recent years. Since the terrorist attacks on America in September 2001, school safety expert Kenneth Trump indicates, "Schools are soft targets. We know that it would meet the purposes of terrorism by striking at the heart of America – its children" (United States Department of Education, 2002, p. 9). Under the No Child Left Behind Act (USDOE, 2001), public school districts are required to have plans of action that outline how they are working to maintain the safety of children and adults in a school environment. Within each state, "local educational agencies (LEAs) play an integral role in protecting the health and safety of their district's staff, students and their families" (United States Department of Health and Human Services, 2006; Center for Disease Control and Prevention (CDC), 2006). U.S. Homeland Security Secretary Tom Ridge and U.S. Secretary of Education Rod Paige emphasize the urgency for schools to be prepared for any emergency, including natural disasters, violence, pandemics, and terrorism (USDOE, 2004). Paige, former superintendent of the nation's seventh largest public school district, stresses that schools should not wait until the midst of a crisis to figure out what to do. He maintains that, "at that moment, everyone involved – from top to bottom – should know the drill and know each other" (USDOE, 2004, p. 1).

Through No Child Left Behind (2001), public school districts must provide evidence of how they plan to keep students and adults safe and drug free. Under the new law, public schools are required to report school safety statistics to the public, and must establish safety plans that include appropriate discipline policies and codes of conduct, security procedures, prevention activities, and risk management plans for violence and other traumatic events (USDOE, 2004). The Safe School Committee Law (2005) also states that, because of the growing threat of violence a safe school committee of at least six (6) members must be formed. The intent of this committee is to involve key community leaders to address school safety. Paige encourages administrators to form risk management teams that include police and fire departments, as well as health and community agencies. A challenge for educational leaders is to decide how to allocate funds towards school safety and security planning. From 2003 through 2004, the U.S. government set aside 30 million dollars to help public schools develop strong risk management plans. In 2006, the federal government allocated \$90 billion for pandemic preparedness, with 90 percent applied to vaccine production and the remainder going to states to develop inter-organizational community partnerships (Winslow, 2006).

Although funding is available, difficult challenges face public school districts and non public schools as they prepare for risks. An educational leader's perception of the importance of school safety and security and his or her perception of the importance of learning are often competing factors. Even though funding is available for school safety and security planning, many educational leaders primarily focus their attention on funding for the accountability of learning and daily operations of the school (M.J. O'Hair, personal communication, August 30, 2006). However, current research reports that there

are important deficiencies in school emergency/disaster planning. This research indicates that rural districts are less well prepared than urban districts (Graham, Shirm, Liggin, Aitken, & Dick, 2006). Like all schools, rural schools face many pressures. Rural schools also face a unique set of challenges, largely due to geographic isolation. New federal and state accountability requirements, and debates about the allocation and availability of education funding are difficult challenges.

Consequently, in response to federal mandates as well as national urgency for school safety planning, state legislatures and some educational leaders have taken proactive steps to ensure that communities and schools are preparing for risks. Each year, in states across the nation, conferences address the importance of creating and maintaining a stable, safe learning environment. Workshops that focus on safe and healthy schools are offered to attendees. However, literature suggests that appropriate and effective school responses to risk needs further study. State directors of Homeland Security challenge communities to better prepare for all types of emergencies. School safety specialists suggests that all local public safety stakeholders review options for different scenarios by holding meetings in a variety of locations, including businesses, schools, hospitals, and other institutions. Continued process must stress that all parties, including schools, need to reemphasize preparedness, conduct drills, and double-check contingency plans (Garrett, 2005, Ong, 2003, Sokoloff, 2000, Owens, 1999).

Statement of the Problem

With heightened awareness of probable risks to a stable, safe learning environment, along with state and federal mandates, educational leaders and schools must

establish and maintain comprehensive school safety and security plans that include interorganizational collaboration.

Well-intentioned education leaders, who try to create successful school safety and security plans, are faced with a magnitude of complex issues. Educational leaders, who take on this formidable task, may have no way of knowing if their school safety and security plan is adequate. Based solely on their perceptions, there will be many variations hinged on different plans for different circumstances and learning environments.

As the threat of natural disaster, terrorism, acts of violence, pandemics, and other risk situations have become more prevalent, our society has become more complex, creating systems of problems (meta-problems) rather than discrete problems. Ultimately the solutions for these problems are beyond the capacity of single organizations. In exemplary schools, a thorough school safety and security planning process depends on the ability to innovate consistently. According to theories in organization development, the learning organization, which focuses on systems thinking, can be established that enhances a leader's ability to utilize problem-solving strategies (Senge, 1990; Yeo, 2005; Thomas & Allen, 2006; Small & Irvine, 2006). A systemic approach to managing learning and knowledge has been shown to influence exploration that involves the search for knowledge along different dimensions (Zander & Kogut, 1995). According to theories in inter-organizational collaboration, exploration that involves searches along different dimensions is the fundamental mechanism by which organizations learn and share knowledge (Trist, 1983; Hardy & Phillips, 1999; Black et al., 2002; Hardy, Phillips, & Lawrence, 2003; USDOE, 2004; National Association of School Nurses,

2005). The theory of environmental scanning indicates that the keys to successful scanning are active and open exploration of communities incorporating diverse sources of information and diverse viewpoints (Aguilar, 1967; Choo & Auster, 1993; Voros, 2001; Linden, 2002). Studies of boundary spanning determine that this strategy influences an organization's capability under various environmental conditions. Utilizing boundary spanning establishes a network of connected agents, tasks, resources, and knowledge (Hazy, Tivnan, & Schwandt, 2003).

By utilizing the learning organization strategy of a systemic approach, integrated with environmental scanning and boundary spanning, schools establish their ability to generate, acquire, and integrate both internal and external sources of knowledge.

Because it is imperative that school communities utilize strategies to regulate and reduce the turbulence associated with risk situations, the development of inter-organizational collaboration is the essence of an effective school safety and security planning process. Although the meta-problem of establishing and maintaining a stable, safe learning environment in all schools is widely recognized, the amount of conflict and the degree of ambiguity is great. However, the overriding factor is the complex perceptual and conceptual risk perception process of those involved in the school safety and security planning process, which melds together judgments of reality and judgments of value that influences the process.

The perception of risk, according to theories in cognitive psychology and neuroscience, is indicated by a human's ability to utilize two underlying systems. The systems used in the decision making process are the analytic system and the experiential system. The analytic system relies on algorithms and normative rules, such as probability

calculus, formal logic, and risk assessment. It is relatively slow, effortful, and requires conscious control. The experiential system is intuitive, fast, mostly automatic, and not very accessible to conscious awareness. Although proponents of formal risk analysis tend to view the experiential system as irrational, studies have demonstrated that analytic reasoning cannot be effective unless it is guided by intuition, emotion, and affect (Slovic, Finucane, Peters, & MacGregor, 2004).

Damasio (1994), a neurologist, presented one of the most comprehensive and dramatic theoretical accounts of the role of affect and emotion in decision making. He theorized that thought is largely made from images, broadly construed to include perceptual and symbolic representations. A lifetime of learning leads these images to become marked by positive and negative feelings linked directly or indirectly to somatic or bodily states. This interaction is characterized as 'the dance of affect and reason' (Finucane, Peters, & Slovic, 2003). Therefore, it stands to reason that long before there was probability theory, risk assessment, and decision analysis, there was intuition, instinct, and gut feeling. However, as circumstances becomes more complex and humans gain more control over their environment, analytic tools are invented to 'boost' the rationality of their experiential perception and lead to the conviction that these tools are of more importance. The perception and integration of affective feelings, within the experiential system, appears to be a high-level maximization process. Therefore, it is important that those who lead the school safety and security planning process understand their role as a risk analyst.

The role of the risk analyst is in a constant state of flux as the definition of risk continues to evolve. The language of risk assessment continues to have chameleon-like

qualities, and the various risk analysis specialties overlap in domains of interest. It is this overlap that turns out to be extremely important, as it provides the insight into how different aspects of the risk communication process can be tied together (Garrick & Gekler, 1991). Although there is rapidly growing literature on the topic of risk communication, there is little consensus over what is meant by risk. At one extreme it is defined as an objective property of an event or activity and is measured as the probability of well-defined adverse events. While the most common definition is the probability of an adverse event (e.g. injury, disease, death) times the consequences of that event (e.g. number of injuries or deaths, types and severity of diseases), others in the constructivist paradigm, define risk as nothing more than subjective perceptions shaped by the filters of culture and social structure (Rosa, 2003).

It is clear that risk perception is carefully developed with both individualistic and cultural associations in mind. It is what individuals or societies perceive as risk and chooses to concern themselves with as risk that molds the objective state of risk. This perception is further shaped by social, cultural, and political factors – as well as the precision of a person's analytic tools for identifying risk in the first place (Eiser, 1994; Rosa, 2003). Representations of the risk of any object or activity are shaped by a combination of social and cultural experiences and cognitive factors that are stored in the memory as patterns of 'learned association' (Eiser, 1994). These provide the basis for attitudes that can generalize across related issues, which is referred to as 'attitudinal certainties.' This can account for differences between attitudes to different environmental or social issues, and to selective interpretation of new risk information in accordance with prior attitudes (Marris, Langford, & O'Riordan, 1998).

An educational leader's perception of future risks changes immediately within minutes of a crisis (previously perceived as a risk). Responses to the incident are guided by an individual's perceptions and his or her implementation of the school safety and security plan. The impact of the tragedy upon the organization is assessed in terms of the implemented plan or lack of one. When natural disaster, terrorism, acts of violence, which includes shootings, drug overdoses, suicides, pandemics, and other risk situations ripple through school organizations, leaders agonize over completion of the school safety and security plan. Administrators closest to the risk take varying paths to ensure their students' and faculty's security and sanity. However, leaders in school organizations may miss the mark if they have not perceived the incident as an acceptable-risk problem (Fischhoff, Lichtenstein, Slovic, Derby, & Keeney, 1981). This can also hold true if they do not perceive the long-term psychological damage traumatic events have upon students and adults as an acceptable-risk problem.

The fact remains that there are no unequivocally right answers to all risk situations and in the aftermath of a risk situation adults and children struggle with the emotional impact of large-scale damage and loss of lives. Major events that have been felt across the country include the 2005 Hurricane Katrina in Louisiana, Mississippi, and other southern states, 2001 terrorist attack with hijacked jetliners on the New York City World Trade Center and Pentagon bombings and subsequent airline crash of Flight 93, the 1999 shootings at Columbine High School in Littleton, CO, the 1999 Hurricane Floyd in Florida, the 1995 bombing of the Alfred P. Murrah Federal Building in Oklahoma City, and the 1994 earthquake in Northridge, California. Each year many children,

adolescents, and adults sustain injuries from violence, lose friends or family members, or are adversely affected by witnessing a violent or catastrophic event. In this environment there are definite signs that school organizations are expected to provide an effective response and appropriate caregiving services. The challenge for school organizations is to increase their schools' ability to ensure the welfare of students, faculty, and staff in times of risk.

School Safety and Security Planning Process

Although the major events mentioned above prompted federal officials to step up campaigns to make public schools safer, the lack of well-controlled research on the perceptions of acceptable-risk problems by educational leaders and their constituencies, the safety of educational institutions, and the inter-organizational collaborative efforts leaves many unanswered questions (Black, 2004; Schreck & Miller, 2003; Fontaine, 2003; Vettenburg, 2002). Non public schools have also devised and implemented school safety and security plans at all levels (Bassett, 1999; NAIS, 2001 & 2003). However, inconsistencies exist between educational leaders' and their constituencies' perceptions of acceptable-risk problems, the safety of educational institutions, and the inter-organizational collaborative efforts. Through discussions and group meetings with educational leaders and community organizations, it is evident that there is a difference in perceptions of acceptable-risk problems and how to take action.

Those in the field of education, such as school counselors and school nurses who prepare for risk and participate in the treatment of grief and trauma, often feel overwhelmed and unskilled in their treatment of students and adults who have been involved in or witnessed a traumatic event. The differing responses and the manner in

which students and adults may mask them, put administrators, teachers, school counselors, school nurses and psychologists on the front lines to ensure that all are screened for psychological disorders, that they receive professional help if needed, and that they begin to heal from disastrous events that otherwise could leave lifelong scars (Hoff, 2001). In educational organizations, the educational leader is ultimately responsible for this preparation and treatment. His or her perception of acceptable-risk problems that could lead to tragedy or disaster and the need for screening and professional help, drives the final decisions relating to the school safety and security planning process.

When educational leaders become better informed concerning the school safety and security planning process, they gain a clearer understanding of the immediate and long term effects of potential risks to a safe, secure learning environment. Terrorist attacks throughout the world, natural disasters, pandemics, as well as daily risk situations such as suicides, shootings, drug overdoses, abuses, rapes, and other forms of violence and disaster, have an immediate impact on what happens in a learning environment, and the effects of these events will likely be felt for years to come. News media outlets' broad reach and potential to influence knowledge, attitudes, and behaviors, are major channels for disseminating messages that are repeated constantly throughout the day and night. This repeated, and often gruesome depiction of life, enhances the impact on all those associated with non public and public schools. This plethora of information has many teachers and administrators becoming moderators rather than dispensers of knowledge. Teachers for example, often incorporate the unfolding events into the

existing curriculum and recognize that they must be prepared to set aside their daily planned activity to take up more urgent matters (Hoff, 2001).

One of the greatest impacts of natural disaster, violence, terrorism, pandemics, and tragedy is psychological, initially in the form of mass panic and later ranging from posttraumatic stress disorder, anger, or guilt to posttraumatic stress disorder, phobias, sleep disorders, depression, or substance abuse (DiGiovanni, 1999). School counselors and school nurses recognize that "it will generally be the terror generated by a major event, not the event itself, that will have the greatest long-term negative impact on children and families throughout the nation" (National Advisory Committee on Children and Terrorism, 2003, p. i). Even those clinicians who specialize in the treatment of grief and trauma feel overwhelmed. It is important to recognize that severe psychological distress is not simply a consequence of experiencing a threatening and/or frightening event; it is also a consequence of how a child or an adult experiences the event, coupled with his or her own unique vulnerabilities (Redlener, 2002).

Parents, children, teachers, administrators, and all those associated with non public and public schools put their trust in the decisions of the educational leaders concerning the establishment and maintenance of a safe, secure learning environment. They also trust the school organizations, which have person-like attributes such as intentions and values, to have a plan in place at the time of a risk. Evaluating risks as objectively as possible, and establishing inter-organizational collaboration are the core tasks in the school safety and security planning process.

No clear model exists for addressing all risks, but scholars increasingly urge educational leaders, emergency response providers, school counselors, and school nurses,

to look for multi-dimensional approaches, blending the tools of different disciplines and considering the role of culture, cognition, and content with each individual case (National Research Council, 1989). Objective judgments, whether by educational leaders, community organization leaders (i.e., public health, mental health, medical care, emergency management, law enforcement, fire, homeland security, and transportation), school counselors, or school nurses, are a major component in any school safety and security planning process.

Purpose of the Study

The purpose of this study was to reveal the school safety and security planning process in public school districts and non public schools within a fifty-mile radius of a large metropolitan area located within the four states area of Texas, Oklahoma, Arkansas, and Kansas. The goals of this study were to: confirm the existence of, or non existence of, a systemic approach; verify the existence of, or non existence of, environmental scanning and boundary spanning; identify the relationship between the perceptions of risk of educational leaders and the planning process; learn more about the dimensions distinguishing rural and urban public school districts' and non public schools' safety and security planning process.

Rationale

School safety is at a heightened level across the USA. Many educational leaders are not experts at risk analysis or school safety and security planning. Therefore, expert's opinions are needed to enhance the existing school safety and security planning process. The study of the existing process can serve as a significant contribution by: a) expanding the understanding of a systemic approach, an underlying discipline of the theory of

learning organization; b) offering greater insight into the inter-organization collaboration theories of environmental scanning and boundary spanning; c) recognizing and examining the theory of risk perception, d) providing a unique perspective and understanding of the effect these theories had on the school safety and security planning process, and e) providing information as to what the dimensions were that distinguished rural and urban public school districts' and non public schools' safety and security planning process.

The finding from this study can be used as a construct to understand the dilemmas of an ideal organization conceptualized by modern theorist and the adequacy of the existing school safety and security planning process. The findings can also be used to recognize shortcomings due to established strategies utilized in existing organizational structures. Because many educational organizations are hierarchical, the free flow of communication is often impeded (Blau & Scott, 1962). However, if hierarchical differentiation does not block but frees the flow of communication, inter-organizational collaboration may be easier to establish and implement. When a systemic approach is utilized and inter-organizational strategies are established, a leader's perception may become more accurate, therefore allowing for the creation of an exemplary school safety and security planning process based upon expert stakeholders' advice and guidelines.

Research Questions

- 1. How is the school safety and security planning process enhanced when educational organizations utilize a systemic approach?
- 2. Why is the school safety and security planning process less comprehensive when educational organizations limit explorations to internal networks?

- 3. Why is the school safety and security planning process more comprehensive when educational leaders utilizes inter-organizational collaboration?
- 4. What is the relationship between educational leaders' perceptions of risk and the school safety and security planning process?
- 5. What are the dimensions distinguishing rural and urban public school districts' and non public schools' safety and security planning process?

Methodology

A qualitative/mixed-methods study was designed to study the school safety and security planning process. The methodological approach was a case study, including sixty-two sites, and three pilot sites. Document analysis of existing school safety and security plans, personal interviews with educational leaders, educational leaders' risk perception surveys, and demographic information was collected that related to the school safety and security planning process. Through interviews and document analysis, information was obtained that determined the establishment of a systemic approach and determined the utilization of environmental scanning and boundary spanning. Through interviews and the perception of risks survey, information was acquired that determined educational leaders' perception of specific risks to the learning environment and how perceptions affected the school safety and security planning process. Demographic information provided further examination of the dimensions that distinguished rural and urban public school districts' and non public schools' safety and security planning process.

Assumptions

For the purpose of this study, the researcher assumed that:

- Educational leaders are responsible for creating a school environment that is stable and safe, yet prepared for risk
- 2. There is concern regarding the fact that risks are present in public school districts and non public schools.
- 3. The school community expects educational leaders to actively explore strategies that enhance the school safety and security planning process.
- 4. The school community is committed to assuring that public school districts and non public schools provide a stable, safe learning environment.
- 5. Educational leaders are not safety experts.

Limitations of the Study

Several limitations of this study are acknowledged as follows:

- 1. The study was limited by the sample size and to the responses and perceptions of the educational leaders within a fifty-mile radius of a major metropolitan area, located within the four states area of Texas, Oklahoma, Arkansas, and Kansas.
- 2. The study was limited to the possible personal and professional biases of respondents due to their own life expectations, experiences, and educational training.
- 3. This study was limited by the particular interview questions and survey used by the researcher.
- 4. This study was limited by researcher bias.

Definition of Terms

Bioterrorism: Terrorism that uses biological weapons, which are organisms (bacteria or viruses) or toxins that can kill or injure people, livestock, or crops. According to the Centers for Disease Control and Prevention (CDC, 2001), the four categories of bioweapons are as follows: (a) bacteria such as plague, anthrax, and tularemia; (b) viruses such as smallpox and viral hemorrhagic fevers; (c) rickettsias such as Q fever; and (d) toxins such as botulinum, ricin, and mycotoxins. The CDC also has identified an "A" list of biological agents of highest concern, which includes (a) variola major (smallpox), (b) Bacillus anthracis (anthrax), (c) Yersinia pestis (plague), (d) Francisella tularensis (tularemia), (e) botulinum toxin (botulism), and (f) filoviruses and arenaviruses (viral hemorrhagic fevers).

Independent Schools Associations: Membership organizations representing approximately 1,200 Independent schools and associations in the United States and abroad. They offer a broad variety of services to their member schools and associations. The Associations of Independent Schools acts as the voice of Independent pre-collegiate education and as the center for collective action on behalf of its membership. It serves and strengthens its member schools and associations by articulating and promoting high standards of educational quality and ethical behavior by working to preserve their independence to serve the democratic society from which that independence derives and by advocating broad access for students in affirming the principles of equity and justice. Examples include: National Association of Independent Schools (NAIS), Independent Schools Association of the Central States (ISACS), Independent Schools Association of the Southwest (ISAS), etc.

Influenza Pandemic: An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide with enormous numbers of deaths and illness. With the increase in global transport and communications, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world (World Health Organization (WHO), 2006).

Non public school: Private, non-profit K-12 school that operates non publicly and is governed by a board of directors or trustees (approximately 1500 in the USA, many with religious affiliations).

Non public school educational leader: A person who is hired or fired by the board of

trustees. The board's involvement in day-to-day operations can affect the role of the headmaster by defining limiting distinctive powers and leadership responsibilities.

Post Traumatic Stress Disorder (PTSD): A characteristic set of symptoms resulting from exposure to a traumatic stressor. The kinds of stressors, which are most likely to result in PTSD, include death, serious injury/harm, and other threats to physical integrity. Exposure is defined as directly experiencing or witnessing a traumatic event or learning about an event being experiences by a family member, close friend, or another loved one

Risk Communication Process: To become aware, inform, and persuade an audience or an individual to take action concerning a risk. A subset of technical communication with its own characteristics – the communication of health, safety, or environmental risks.

Includes three components: risk awareness, risk assessment, and risk management.

(Brock & Cowan, 2004).

Terrorism: The use of force or violence against people or property to create fear and to get publicity for political causes.

Violence: Suicides, shootings, drug overdoses, abuses, rapes, and other forms of tragedy.

Organization of the Study

This study is divided into five chapters. Chapter I is the statement of the problem, purpose of the study, rationale, research questions, methodology, assumptions, limitations of the study, definition of terms, organization of the study, and summary.

Chapter II provides the reader with an overview, review of the literature related to the theories of learning organization, inter-organizational strategies of environmental scanning and boundary spanning, risk perception, and geographic location, the school safety and security planning process, modeling the school safety and security planning process, which includes the research questions, and summary.

Chapter III describes the methodology of the study, which includes the research context, validity and reliability, research participants, instruments for data collection, research methods, procedures, treatment of the data, and summary.

Chapter IV reports the results, which includes the school safety and security planning process, risk perception data, patterns among cases, frequency distributions and percentages, research questions, and summary.

Chapter V is the discussion, which includes summary of the study, conclusions, significance of the study, implications of the study, limitations of the study, future research, and summary.

Summary

The information related to the theories of the learning organization, and interorganizational collaboration, combined with risk perception theory, represented vital constructs for building theory from case study research in the area of risk communication and the school safety and security planning process. Educational leaders, who review this information and encourage dialogue with their stakeholders, offer a pathway for the evaluation of the quality and appropriateness of their school safety and security planning process. Risk awareness, risk assessment, and risk management that deal with natural disasters, violence, terrorism, tragedy, pandemics, and risk situations in the school environment offer the application of strategies to assist all those involved in this process to be prepared in maintaining a stable and safe haven for learning. Health, safety, and environmental risk analysis requires reasoning about the potential occurrence of undesirable possible future events and seeks ways to manage them. Sound risk management decision-making recognizes that the empirical facts and evidence on which current decisions are based are usually incomplete and evolving (Cox, 1991). Therefore, an educational leader's ability to recognize, represent, and reason effectively with intermittent information, and with incomplete causal knowledge, is essential to the establishment of a learning organization that utilizes inter-organizational collaboration, and to an effective school safety and security planning process.

CHAPTER II

Literature Review

Overview

Educational leaders of the 21st century are challenged by new relationships with their many stakeholders and their integrated role of school leader and school manager. Their success will depend on their ability to harness the capacity of these stakeholders, to enhance their understanding of sense and meaning, and to build a community of responsibility (Sergiovanni, 2006). The culture that eventually evolves in an educational organization is a complex outcome of external pressures, internal potentials, and responses to critical events and to chance factors that could not be predicted (Schein, 1992). Understanding of the discipline of systems thinking helps educational leaders see interrelationships rather than linear cause-effect chains, and processes of change rather than individual incidents (Senge, 1994; Senge, Cambron-McCabe, Lucas, Smith, Dutton, & Kleiner, 2000). Within systems thinking, a learning organization can be established that is enhanced by a leader's ability to utilize a problem-solving organizational development strategy. The organizational development theory of learning organization that establishes a systemic approach supports educational leaders that share responsibility for the risk communication process and provides an essential link in the building of a unified system. Organizational theorists such as Blau & Scott (1962); Gray (1989); Senge (1990); Choo & Auster (1993); Goldring (1995); Argyris (1999); Sergiovanni (2006), and others provide a view of organizations as being complex and dynamic and provide a framework that helps guide and ground this study.

Leaders that have greater affective responses and feel greater social pressure to learn more about a risk perceive a greater need for information, and may therefore

establish better inter-organizational collaboration (Trumbo & McComas, 2003). Griffin, et al. (1999, 2002), who developed the risk information seeking and processing (RISP) model, postulates that the gap between what people know and what they perceive they need to know will influence information processing and information seeking behaviors. The Complacency-Curiosity-Immediacy-Critically (C-C-I-C) Framework (O'Hair, 2005), which integrates individual risk forecasting, information management processes, and resource and media access posits that with the perception of a risk being imminent, the amount of resources and media access will increase. This framework stresses that when risk probability is low, risk messages are unlikely to effect individuals. However, when risk probability is heightened, individuals become curious, process risk messages more directly, and seek additional information from the media and other sources. As the risk becomes more significant individuals become more responsive in their desire for information and will increase their media and source capacity. During the final stage, when the threat seems imminent, the process of information seeking becomes critical.

Educational leaders who have a heightened perception of risk may be better prepared to understand and internalize the C-C-I C framework. They may have a higher probability of establishing a learning organization that utilizes inter-organizational collaboration before the onset of a risk so that they are able to establish relationships with a plethora of available community resources during the school safety and security planning process. Risk perception theorists McGuire (1969); Slovic, Fischhoff and Lichtenstein (1978); NRC (1989, 1996); Gutteling & Wiegman (1996); Trumbo & McComas (2003); Pidgeon, Kasperson, & Slovic (2003) and others help guide and

ground this study by providing an understanding of the affect that educational leaders' perception of risk may have on the school safety and security planning process.

The school safety and security planning process resulting from a systemic approach and inter-organizational collaboration provides information to assist in protecting students and adults in the event of risk situations as well as ensuring a stable, safe learning environment. Educational leaders that form alliances before a risk occurs demonstrate a commitment to address the complexity of the school safety and security planning process. A leader's recognition of the importance of environmental scanning and boundary spanning creates a method that enables him or her to understand the external environment and the interconnections of its various sectors (Morrison, 1992). Leaders are then able to translate this understanding into the institution's safety and security planning and decision-making processes. Environmental scanning and boundary spanning studies conducted by Aguilar (1967); Choo & Auster (1993); Voros (2001); Boynton, Gales, & Blackburn (1993), Daft, Sormunen, & Parks (1988), Sawyerr (1993); Dutton & Jackson (1987); Galbraith (1973); (Kogurt & Zander (1992); Larsson, Bengtsson, Henriksson, & Sparks (1998); Rosenkopf & Nerkar (2001); (Lam, 2001) and others help guide and ground this study by establishing the importance of crossing boundaries to bring together the resources needed to create and maintain a stable, safe learning environment.

The Need for the School Safety and Security Planning Process

Psychological research presented by Maslow (1999), emphasizes that a human being's intrinsic needs must be fulfilled for full growth and realization of development to take place. These needs are: survival, security and safety, belongingness and love, self-esteem, and self-actualization/altruism. These needs are arranged hierarchically, with

survival at the bottom and self-actualization/altruism at the top. The lower level needs are prominent over the higher level needs. Therefore, a child or adult in an educational environment who feels threatened will not be able to focus his or her growth towards learning and reaching the level of self-actualization/altruism.

Everyday fifty-three million young people attend more than one hundred nineteen thousand public and non public schools where six million adults work as teachers and staff (Journal of School Health, 2004). Children were once thought to live in a world that was carefree, distant from the pressures and problems of the adult world, and that when children suffered emotional or psychological stress it was often thought of as a temporary phrase (Vogel, 1995). However, children are the most vulnerable population and times of disaster and trauma increase their vulnerability (DeBord, 2001). Natural disasters, violence, pandemics, or the threat of terrorism that is directed at a child in a school setting erodes a child's sense of safety and trust in his or her learning environment. Therefore, educational leaders, teachers, and all those that interact with children in a school setting carry a particularly heavy burden associated with the responsibility for establishing and maintaining a stable, safe learning environment. In non public and public schools, the threat of natural disasters, school violence, pandemics, and further terrorist attacks are creating an era in which the school safety and security planning process is as important as endowment management and federal and state funding. Natural disasters

Hurricane Katrina was an unprecedented disaster for non public and public schools. It forced school closures longer than any on record, and it ravaged an entire region of school facilities. The terrorist attacks of September 11, 2001, brought

heightened attention to the school safety and security plan process – leading schools to develop disaster plans and hire emergency-preparedness coordinators – but Katrina taught non public and public schools new lessons: to plan for the possibility of extended shutdowns and look beyond their neighbors for assistance (Lipka, 2005).

By utilizing these recent events as an example of disaster response, educational leaders are watching closely to see how affected schools are reacting to and recovering from these disasters. Although schools are simulating disasters, running exercises to test emergency systems, and spotting weaknesses in their plans, concern continues to be prevalent. The importance of having a plan, ensuring that everyone has access to it, and testing the plan has taken on heightened importance. Ensuring that communications survive the event is one of the most critical elements of any school safety and security planning process. Maintaining a chain of command and securing a command center helps to eliminate a potential leadership crisis. Having options for displaced students and faculty members – a 'mutual aid' agreement – that lays out a plan for where students and employees will go – can mitigate the risk that an institution will be at the receiving end of litigation threats. In non public schools, it is necessary to check the school's insurance coverage, especially business-interruption policies to determine if the school can survive a semester, a year, or even two years without tuition coming in (Lipka, 2005). All of these aspects of risk assessment and risk management are imperative to the survival of educational institutions.

School violence

Acts of violence in U.S. schools have become more common in recent years.

Targeted school violence is defined as any incident where a known or knowable attacker

selects a particular target prior to their violent attack (Fein, Vossekuil, & Holden, 1995). Incidents of targeted school violence occurred in 37 communities across the country between 1974 and 2000. Increased national attention to the problem of school violence has prompted educational leaders, law enforcement officials, mental health professionals, and parents to identify, assess, and manage individuals and groups who may pose threats of targeted violence. Although a school is one of the safest places a child can be, an average of 13 students per day are suspended, expelled, or arrested for bringing a firearm to school. Since the tragedy at Columbine High School in 1999 more than 5,000 bomb threats have been made at schools. More than 1 million acts of violence, from fistfights to murders to suicides, occur each year (Rosenstein, Bowles, & Wasson, 2000). Although, compared to other types of violence and crime children face both in and outside of school, school-based attacks are rare (Fein, Vossekuil, Pollack, Borum, Modzeleski, & Reddy, 2002). However, responsible educational leaders have an obligation to recognize school-based violence as a risk.

Influenza pandemic

In the past, new strains of influenza have induced pandemics resulting in high death rates and great social disruption. In the 20th century, the greatest influenza pandemic occurred in 1918 -1919 and caused an estimated 40–50 million deaths worldwide (World Health Organization (WHO), 2006). Although health care has improved in the last decades, "epidemiological models from the Centers for Disease Control and Prevention project that today a pandemic is likely to result in 2 to 7.4 million deaths globally" (WHO, 2006, p 2). In high-income countries, 15% of the world's

population including the United States, there is a projected demand for 134–233 million outpatient visits and 1.5–5.2 million hospital admissions.

Scientists predict that the world is due another influenza pandemic (Centers for Disease Control and Prevention (CDC), 2006). If an especially severe influenza pandemic occurs, it could lead to high levels of illness, death, social disruption, and economic loss. Everyday life would be disrupted because so many people in so many places become seriously ill at the same time. Impacts can range from school and business closings to the interruption of basic services such as public transportation and food delivery. Although contingency planning for a future influenza pandemic is often difficult to justify, particularly in the face of limited resources and more urgent problems and priorities, there is a specific reason to invest in pandemic preparedness. Interorganizational preparation could provide benefits now, as improvements in infrastructure can provide immediate and lasting benefits, and can also mitigate the effect of other epidemics or infectious disease threats.

The U.S. Department of Education is collaborating with the health experts and agencies across the federal government to ensure that, in the case of pandemic flu, the operations and the services they provide will continue. State and local preparedness will be crucial in preventing the spread of disease. Children are known carriers and spreaders of many viruses, which may likely include a pandemic flu virus. Because schools are centers of community life, it is important that educators and administrators form interorganizational collaborations with local officials and community first responders and make planning for pandemic flu a priority. These steps are necessary to maintaining a stable, safe learning environment. United States Department of Education Secretary,

Margaret Spellings states, "When it comes to preparing our school community... there are three key steps to take: One, talk to your local health officials and work together to develop a plan. Then secondly, train your teachers and administrators to implement the plan. And finally, teach students and parents so they understand what to do in the event of a pandemic" (USDOE, 2006, p. 16).

Terrorism

It has become perceptively clear that America must accept the possibility that our schools are a potential target of terrorist attacks. A conclusion has been drawn that there are three reasons for a school to be viewed as a potential target. These reasons are: (1) they are soft targets; (2) school violence incidents create excessive media attention; and (3) acts of terrorism in schools seize parents with panic for their child's safety, causing significant reaction nationwide. When terrorists attack, they are looking for a symbolic target that represents something significant to their opponents; want to send a strong message well beyond their actual target of violence; alter the manner in which people live their lives; and instill a lack of confidence in their government (Dorn, 2002; Trump, 2002).

Terrorists have an acute understanding of two elements of fear. The first element being that one or two terrorist incidents will have a significant impact on both thought and behavior, with exaggerated risk perceptions a likely result of the considerable media attention given to such incidents. The second is that people show a disproportionate fear of risks that seem unfamiliar and hard to control, therefore, they cannot feel safe anymore, anywhere (Slovic, 2000). The aftermath of an act of terrorism produces a large number of ripple effects.

Educational leaders may be quick to prepare a school safety and security plan that attempts to respond to the risk of terrorism, yet do they realize that subjective perceptions of terrorism can be more important than the event itself? Although educational leaders may be primarily concerned with understanding and meeting the needs of students, do they also pay close attention to the potential effect of a risk on teachers and staff members, particularly those who are serving as crisis caregivers for the students? As educational leaders attempt to assess the probability of future terrorist attacks, do they fully understand this phenomenon? Do they also recognize the potential for bioterrorism?

Bioterrorism

Bioterrorism is the intentional use of infectious biological agents, or germs, to cause illness (Connecticut Department of Public Health, n.d.; Bravata, Sundaram, McDonald, Smith, Szeto, Schleinitz, & Owens, 2005). In such an act of terrorism, "the terror created from an unknown, undetectable biological agent can be greater than the terror from explosives and natural disasters, because people do not know if they may be infected" (Baggerly & Rank, 2005, p. 460). The significant aftereffect of bioterrorism is psychological, "initially in the form of mass panic and later ranging from acute stress disorder, anger, or guilt to posttraumatic stress disorder, phobias, sleep disorders, depression, or substance abuse" (Baggerly & Rank, 2005, p. 460). However, dealing with the psychological effects of the bioterrorist attack is often overlooked.

Posttraumatic stress disorder

Following an incident, which took place at a Connecticut elementary school, Federal Emergency Management Agency (FEMA) along with District Level Crisis

Management Supervisors, and Crisis Team Coordinators from Connecticut schools identified basic security measures that became part of the district plan. Even though one teacher died, 12 students were infected, along with 3 office staff members, and an administrator, they failed to identify PTSD, "re-emphasizing the fact that mental health needs must be part of any bioterrorism response" (Cosh, Kim, Fullwood, Lippek, Middleton, 2003, p. 8). As a follow up procedure, the district office invited selected parents, community members, local officials from the health department, law enforcement and the fire department, and medical experts from the area to evaluate the district's school safety and security planning process. This incident emphasizes the importance of a collaborative effort in utilizing the perceptions of all those who are responsible in establishing a stable, safe learning environment.

Recognizing the importance of educating school leaders, faculty, and staff with guidelines for recognizing PTSD is paramount. Disasters expose students and adults in independent and public schools to random traumatic events. The extreme magnitude and intensity of recent events, the April 19, 1995 Oklahoma City bombing, the April 20, 1999 Columbine High School shooting, the September 11, 2001 New York City terrorist attacks, along with the 2005 Hurricane Katrina, produce profound psychiatric impact on survivors. According to the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000), "Posttraumatic Stress Disorder (PTSD) is diagnosed when an individual meets the following criteria: (a) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened deaths, serious injury, or a threat to the physical integrity of self or others and (b) the person's response involved intense fear, helplessness, horror, or disorganized or agitated

behavior" (p. 427). Children who suffer from this disorder repeatedly relive the traumatic experience through play, dreams, or flashbacks accompanied by intense psychological distress or physiological upset. Anxiety associated with the event is manifested through a heightened state of general arousal. These symptoms can cause significant impairment and distress. PTSD symptoms interfere with activities, create negative changes in personal relationships, and often require the use of medication to cope.

Research after the 1999 Oklahoma City bombing offered a unique opportunity to study mental health effects of traumatic events. North, Nixon, Shariat, Mallonee, McMillen, Spritznagel, & Smith (1999) conclude that nearly half the bombing survivors had an active post disaster psychiatric disorder, and full criteria for PTSD were met by one third of the survivors. PTSD symptoms were nearly universal, especially symptoms of intrusive reexperience and hyperarousal. The symptom onset was rather immediate and few other cases developed after the first month. Saylor, Cowart, Lipovsky, Jackson, & Finch (2003) add to current studies by indicating that children need not be directly exposed to a disaster to be psychologically affected by it. Further research indicates that, "children may display increased PTSD and anxiety symptoms proportionate to their viewing of media images, both positive and negative" (Saylor, et al., p. 1638).

Ideally, within the risk communication process, and more specifically at the risk management level, professionals who have been trained to identify survivors with PTSD would be on site to start the identification process. However, many school counselors and school nurses have not received sufficient preparation in crisis management. Recent research studies indicate that alarming percentages (ranging from 36% to 62%) of school

counselors in the U.S. have not received adequate crisis management instruction in either their school counseling graduate programs or post-graduate training (Allen, Burt, Bryan, Carter, Orsi, & Durkin, 2002; Auger, Seymour, & Roberts, 2004). Olympia, Wan, & Avner (2005) report that although schools are in compliance with many of the recommendations for emergency preparedness, efforts should be made to increase the education of school nurses in crisis assessment and management. Therefore, having this element built into the school safety and security planning process through the utilization of inter-organizational collaboration, experts in the emergency management community (stakeholders) would provide information, guidelines, and a plan for helping children and adults cope with natural disasters, violence, and terrorism.

Learning Organization

The theory of learning organization reveals that individuals learn by creating meaning from information, and by integrating this meaning into a knowledge consciousness which influences the way in which an organization responds to its environment (Argyris, 1999; Senge, *et al.*, 1999). The core of learning organization research is based on five learning disciplines: 1) personal mastery, 2) mental models, 3) shared visions, 4) team learning, and 5) systems thinking (Senge, 1994). As an organization transforms to a learning organization it becomes aware of the importance of three key guiding ideas: a) the primacy of the whole, b) the community nature of the self, and 3) the generative power of language. During the 1960s and 1970s, the idea of learning organization emerged. With the influence of medical models, leaders and consultants were seen as playing the role of specialist charged with the responsibility of alleviating complications and promoting healthfulness within an organization. From this,

organizations were viewed as a system where relationships between and within groups involving mutual confidence, trust, interdependence, and shared responsibility were emphasized (Bennis, 1969). Senge's (1990) influential work, *The Fifth Discipline*, has been widely referred to as the eminence of learning organization in both the academic and professional arenas. Even today the learning organization theory continues to be expanded upon by Senge (1994, 1996), Pedler (1998), Argyris (1999), Marquardt (1999), Garrat (1999), Garvin (2000), Pedler & Aspinall (2000), Senge, *et al.* (2000), Phillips (2003), Moilanen (2001, 2005), and others resulting in an expansive amount of literature.

The literature representing the learning organization offers a wide range of definitions and perspectives (Yeo, 2006; Thomas & Allen, 2006). The framework for a learning organization "embraces the importance of collective learning as it draws on a larger dimension of internal and external environments" (Yeo, 2006, p.368). Learning organizations thrive on the assumption that what they do is not static, but a dynamically active process of organizing that relies on human cognitive process (Bennis, 1969; Schein, 1988; Morgan, 1997). From this perspective, individuals within the organization are continually engaged in trying to know how things work in producing effects within the organization and its larger context including its external environment. This process is based on reflective inquiry (Argyris & Schon, 1978). Yeo (2006) presents nine definitions of the learning organization from some of the prominent researchers, as shown in Table 1. Yeo's definitions are linked by a common theme – as members learn collectively, they (as an organization) will react more strategically to external challenges.

Table 1

Yoe's (2006, p. 373) Nine Themes of Organizational Learning and Learning Organization

Themes	Theorists	Definitions
Theory in action	Argyris (1993)	In a learning organization, individuals are the key where they
		are acting in order to learn, or where they are acting to
		produce a result. All the knowledge has to be generalized and
		crafted in which the mind and brain can use it in order to make
		it actionable
Renewal	Braham (1996)	Organizational learning is learning about learning. The
		outcome will be a renewed connection between employees
		and their work which will spur the organization to create a
		future for itself
Organizational	Denton (1998)	Organizational learning is the ability to adapt and utilize
		knowledge as a source of competitive knowledge. Learning
		must result in a change in the organization's behavior and
		action patterns
Action learning	Garratt (1995)	A learning organization is linked to action learning processes
		where it releases the energy and learning of the people in the
		hour-to-hour day-to-day operational cycles of business
Technological	Marquardt and	A learning organization has the powerful capacity to collect,
	Kearsley (1999)	store, and transfer knowledge and thereby continuously
		transform itself for corporate success. It empowers people
		within and outside the company to learn as they work.
		A most critical component is utilization of technology to
		optimize both learning and productivity

Yoe's (2006, p. 373) nine themes of organizational learning and learning organization (continued)

Themes	Theorists	Definitions
Growth and	Pedler et al.	A learning organization is like a fountain tree where the image
Survival	(1997)	of energy and life is characteristic of growth and survival.
		Organizational members are constituents of this fountain tree
Cultural	Schein (1996)	The key to organizational learning is helping executives and
		engineers (groups representing basic design elements of
		technology) learn how to learn, how to analyze their own
		cultures, and how to evolve those cultures around their
		strengths
Systems	Senge (1990)	Organizational learning involves developing people who learn
		to mastery, and who learn how to surface and restructure
		mental models collaboratively see as systems thinkers see,
		who develop their own personal
Team-building	Watkins and	A learning organization is one that learns continuously and
	Marsick (1993)	transforms itself where the organizational capacity for
		innovation and growth is constantly enhanced

Nominalist position. The learning organization theory is based on a nominalist position where knowledge is perceived as tacit, softer, spiritual, and even transcendental based on the insight of the unique individuals. When a learning organization is perceived to be a dynamic process, a variety of integrated processes are incorporated that are not necessarily straightforward or simple models. A nominalist position holds greater capacity to capture more of the subtleties of the process, and is concerned with the process of making sense of the perceived real world (Yeo, 2006). This negotiation with the reality "is a meta-cognition that is commonly found in organizational learning

practices influencing members to acquire knowledge strategically and be involved in process evaluation" (Yeo, 2006, p.369).

The learning organization focuses on the process of gaining, sharing, and utilizing the knowledge offered by individuals who possess relevant information via interactive relationships, and transferring it through the organization to meet a specific goal (Murray, 2002). Leaders make decisions on the basis of internal representation of the world through mental models. A leader's mind creates inner representations that correspond to his or her reality and perception. A leader's cognition can be viewed to operate on three levels: 1) activities such as reading, perceiving, and memorizing; 2) meta-cognition, involving the acquisition of knowledge about particular strategies to solve problems, and the evaluation of success or failure of the process; and 3) epistemic cognition, the process where the individual learns to understand the nature of the problem and the value of alternative solutions (Kay & Bawden, 1996). At the core of the learning organization are the collaboration among contributing members, and the collaborative strategic reaction to external challenges.

Systems Thinking

Within an educational organization, the leader is continuously challenged by the necessary integration of important aspects of the overall system. In the past, safety was often thought of as either, a non issue, or it had a minimal process. However, today's educational environment must be thought of as a well conceived, well planned, and well maintained safe, secure environment. Educational leaders who have a developed perception of risk, and enhance the school safety and security planning process by

recognizing the importance of a collective strategic plan utilize the theory of systems thinking.

In the 1990s, Senge (1990) referred to the learning organization as a vision. This elusive, non-testable organizational development theory generated considerable discussion among researchers about the dichotomy between the practical (learning organization as an outcome) and the metaphysical (learning organization as a vision) (Fulmer & Jeys, 1998). However, Buckler (1996), Reynolds & Ablett (1998), and Steiner (1998) recognize that when considering a holistic approach to learning, Senge's notion of systems thinking allows individuals to see underlying structures and patterns of behavior that are obscured in the complexity of daily events and activities.

Systems thinking emphasizes the importance of seeing the big picture associated with the overall organizational goals other than the individual myopic job of functions. Systems thinking can play a dual role: one as a skill to help organization members in their learning process, and two as an integrative approach to a more effective operation of the five disciplines. It encompasses a large body of methods, tools and principles, which examine the interrelatedness of forces, and visualize them as part of a common process. The theoretical field includes cybernetics and chaos theory; gestalt theory; the work of Gregory Bateson, Russell Ackoff, Eric Trist, Ludwig von Bertallanfy, and the Santa Fe Institute; and dozens of practical techniques for 'process mapping' of flows of activities within organizations (Senge *et al.*, 1994). A systemic approach requires effective collaboration both internally and externally and a leader who sees the interconnections in complex systems.

Constructs. The interconnected structure of learning provides a common theme for comparison of various three-stage learning organization models. Senge's (1990) systemic approach compliments Watkins & Marsick's (1993) team-building model, Hawkins' (1991) triple-loop learning, and Griffey's (1998) three-stage conceptual hierarchy. For this study, emphasis is on risks associated with learning organization models (schools), which incorporate events that are complex and deal with external environments. At this level, learning occurs when a solution cannot be found by any acceptable means within the given limitations of the organization. Therefore, the main objective then becomes the development of inter-organizational collaborations that result in solutions to prepare schools to deal with the dynamic changes of the external environment. Schools that establish inter-organizational collaborations recognize it as very complex work and that it requires high-level systems thinking (Senge, 1994; Senge et al., 2000; Sergiovanni, 2006).

Inter-Organizational Collaboration

The process of joint decision-making among stakeholders regarding a risk situation depicts inter-organizational collaboration. Collaboration occurs when a group of autonomous stakeholders engage in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to the domain (Wood & Gray, 1991). There are four concepts associated with the collaborative process, which include; joint decision-making, interdependence, shared purpose and resources, and interactive process. A successful inter-organizational collaboration generates shared ownership, mutual benefits, and inter-organizational learning among participating stakeholders (Huxham & Vangen, 2000). A stakeholder is defined as "any person, organization, community or

government that is affected or can affect the deliberations of and potential solution to the issue that requires the collaborative process" (Finn, 1996, p. 156). A broad spectrum of stakeholders will improve chances of maintaining a stable, safe learning environment.

Educational leaders who cross boundaries and create inter-organizational collaboration to bring together the resources needed to create and maintain a stable, safe learning environment better identify specific strategies (Goldring, 1995, 1996). Interorganizational collaboration utilizes a systemic approach to the school safety and security planning process, which takes into consideration risk assessment and risk management. It utilizes well-considered and deliberate decisions based on empirical evidence about what is and what is not management concerning a particular risk. The systemic planning of information transfer, based on inter-organizational collaboration and scientific research, to prevent, solve, or mitigate a risk with adjusted and customized information (risk messages) for specific target groups is a social process in which two-way communication is applied (Gutteling & Wiegman, 1996). This approach is beneficial in increasing risk management's effectiveness. Gray (1989) illustrates the interorganizational infrastructure showing the complexity of the risk communication and risk management process. The experience of inter-organizational collaboration is the "process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible" (Gray, 1989, p.5).

Research has shown that the collaborative process gathers professionals from organizations that differentiate responsibilities and their orientations toward the problem. It promotes diversity in stakeholders and embraces the natural complexities that produce

a more comprehensive process. The process brings forth goals, values, and priorities that articulate the overall purpose of the alliance and begins to identify the resources necessary to manage a risk. The developmental phases for establishing interorganizational collaboration move from selecting key stakeholders, committing to work together, attending to the problem domain, to finally managing implementations of ideas and recommended proposals (Gray, 1989; Baily & Koney, 2000). Flexibility, adaptability, and ongoing information sharing are the key aspects of the collaboration. Environmental Scanning

One manner of maintaining a stable, safe learning environment is by establishing a systemic approach to the school safety and security planning process. A systemic approach encourages the integration of inter-organizational collaboration as a strategy for proactive school safety and security planning and recommends that the educational leader utilize environmental scanning and boundary spanning. Environmental scanning techniques are consistent with learning organization strategies (Linden, 2002). Environmental scanning (ES) is the acquisition of and use of information about events, trends, and relationships in an organization's internal and external environments (Aguilar, 1967; Choo & Auster, 1993; Voros, 2001). Assessing risks utilizing ES creates uncertainty and the need for change. However, through the search for important cues about how the world is changing, environment scanning helps inter-organizational domains create a risk management framework that will lead the educational institution towards a strategic assessment of future events (Moen, 2003). Studies done by Boynton, Gales, & Blackburn (1993), Daft, Sormunen, & Parks (1988), and Sawyerr (1993) indicate that with uncertainty and change environmental scanning increases. Dutton &

Jackson (1987) and Galbraith (1973) determined that scanning activity is inherent in the identification of and formation of strategic issues and the analysis of alternative courses of action.

Environmental scanning is also considered the exploration phase of identifying potential opportunities (Aguilar, 1967; Choo & Auster, 1993). It is the recognition that "information seeking is seldom an end in itself, but instead is part of the processes of decision making and problem solving" (Rouse & Rouse, 1984, p. 134). The original intent of ES was to provide comprehensive information on the current external environments. Recently, researchers have argued that "ES as currently practiced is somewhat narrow and shallow in focus, and calls for a move from the largely 'exterior' focus presently employed, to a greater emphasis on the 'interior world'..." (Voros, 2001, p. 3). The more ES utilizes a systemic approach, the more likely organizations will avoid blind spots while scanning. The environmental scanning process results in preliminary information needed to select priority issues for which specific plans will be developed.

The keys to successful scanning are active and open exploration of communities incorporating diverse sources of information and diverse viewpoints. Scanning is an opportunity to take an objective look at organizational needs. There are four objectives of ES: 1) detecting important economic, social, cultural, environmental, health, technological, and political trends, situations, and events; 2) identifying the potential opportunities and threats for the organization implied by these trends, situations, and events; 3) gaining an accurate understanding of an organization's strengths and

limitations; 4) providing a basis for analysis of future strategies (Eadie, 1989; West, Clegg, & Black, 1988; Sofranko, & Khan, 1988).

Conceptual framework for environmental scanning. Research relating to ES from 1977 to the present suggests environmental scanning improves organizational performance. Miller & Friesne (1977) analyzed eighty-one case studies and found that the intelligence-rationality factor was the most important factor in separating the successful organizations from the unsuccessful. The intelligence-rationality factor is comprised of environmental scanning, and controls communication, adaptiveness, analysis, integration, multiplexity, and industry experience. Newgren et al., (1984) compared the economic performance of twenty-eight US organizations that practiced ES with twenty-two non-practicing organizations, and found that scanning organizations significantly outperformed non-scanning firms. These studies concluded that ES has a positive influence on performance. Dollinger's (1984), West's (1988), Porter's (1985), Daft et al.'s, (1988), Subramanian et al.'s (1994) studies of the relationship of organizational strategy and ES showed higher growth and profitability than firms that did not share such systems. The benefits of scanning are not solely economic or financial. In an in-depth case study of ES at the Georgia Center for Continuing Education, Murphy (1987) concluded that scanning is an important component of the organization's strategic planning process. Ptaszynski's (1989) study found scanning to have a positive effect on the educational organization in these areas: communication, shared vision, strategic planning, and management. The most significant effect "was that scanning provided a structured process which encouraged people to regularly participate in face-to-face discussions on planning issues...developing a number of strategic options that could be

used proactively to cope with external change" (Choo, 2001, p. 4). Correia & Wilson (2001) focused their research on how the information that flows into the organization is internally organized; whether there is any integration of that information with the internally generated information; the identification of internal conditions – of an organizational as well as of an individual nature – that may influence access to and use of information in organizations.

Environmental scanning construct. As stated before, when a solution cannot be found within the given limitations of the organization, the main objective becomes the development of inter-organizational collaborations. For this study, the existence of environmental scanning as an inter-organizational strategy by educational leaders to ensure a stable, safe learning environment is recognized as a possible advancement of interplay between conditions, the responses of the educational leader, and the consequences that result in direct action. The setting of conditions that determine access to and use of information in a school organization, and the openness of the school organization to the external environment will be assessed. Educational leaders, who scan the environment in order to understand the external forces of change, do so in hopes that they can develop effective internal responses that create and maintain a stable, safe learning environment. They scan in order to avoid surprises, identify threats and opportunities, and improve long-term and short-term planning (Sutton, 1988). Environmental scanning includes both looking at information (viewing) and looking for information (searching). Environmental scanning becomes increasingly important to the school safety and security planning process when used as a strategic formal system of information collection and appraisal providing the opportunity to devise and implement a strategically designed school safety and security planning process. However, educational leaders may have limited scanning capacity and resources therefore causing them to selectively direct their attention to various sectors in their environment.

Boundary Spanning

One way of utilizing important information gathered during environmental scanning is through boundary spanning. A definition of knowledge is needed to further the understanding of boundary spanning. Staples, Greenaway & McKeen (2000) define knowledge as "neither a fact or a message acting upon the receiver. It is a potent stew of experiences, values, context information, and expert insight that resides within the individual" (p. 2). Therefore, boundary spanning can be defined as the coordination of experiences, values, context information, expert insight, and the actions of two or more independent organizations. Learning organization literature offers a plentiful stream of studies related to boundary spanning, with many having a focus on knowledge management (Kogurt & Zander, 1992; Larsson, Bengtsson, Henriksson, & Sparks, 1998; Rosenkopf & Nerkar, 2001). However, external environmental management in education is somewhat limited to the school leader as the boundary spanner. A boundary-spanner is often the individual that connects the collaboration to funding sources, and handles project planning (Keller & Holland, 1975; Himmelman, 1996).

For this study, literature related to how boundary spanning can lead to the reconfiguration of core practices and the emergence of a community of practice (Lam, 2001) is important. The expanded strategies of boundary spanning include working together with several hierarchical organizations, supervising interagency professional staff, and mobilizing resources in the community. At the first organizational stage, Thompson (1997) and Goldring (1995) agree that altering an organization requires responding to environmental contingencies that include organizational redesign and strategic maneuvering, negotiation, growth and diversification. Groups often have the responsibility to formally or informally establish and maintain communication patterns across organizations (Alexander, 1995). At this level, boundary spanning information systems integrate information-flow and coordinate work across 'islands' of knowledge (Lamb & Davidson, 2000; Markus, Majchrzak, & Gasser, 2002). The creation of shared knowledge is feasible when organizations share and improvise local practices, through membership in the same workgroup (Gasson, 2005). By belonging to a community of organizations, mutual engagement in joint enterprise utilizes a shared repertoire of resources (Wenger, 1998). Not only do individual participants belong to multiple communities of practice, "their multiple memberships provide a mediating mechanism that permits the spanning of boundaries between these communities" (Wenger, 1998, p. 123).

Within an educational setting, boundary spanning involves a deliberate strategy by the educational leader to communicate with organizations outside of the school's internal network. It is the dominant means by which critical information can be gathered and utilized in an inter-organizational collaborative school safety and security planning process. The divergence and tension between information and experience within a boundary spanning educational organization constitutes an important source of learning and innovation (Lam, 2001). When inter-organizational groups are formed to address school safety, boundary spanning allows for interactions with outside stakeholders and enables members to effectively deal with ambiguities of external threats (Golden &

Veiga, 2005). Through boundary spanning, educational leaders are facilitating the acquisition of meaningful knowledge from different organizational environments.

Meaningful knowledge is constructed within inter-organizational groups, where knowledge is shared freely through collaborative processes such as conversation and joint work (Orr, 1990; Brown & Duguid, 1991; Wenger, 1998). Collaboration between organizations exists in part because there is a belief in the power of many versus one in successfully addressing a shared problem among large and/or diverse organizations (Gray, 1989). When educational organizations cross boundaries to bring together the resources needed for an adequate school safety and security planning process, lasting change occurs in which the entire school community benefits.

Inter-organizational domains. For this study, the existence of boundary spanning within educational institutions is being analyzed. Educational institutions are faced with demands for immediate and comprehensive responses to complex safety issues.

Educational leaders are searching for stakeholders that share common interests in these problems. Through a collaborative approach all are searching for a multi-layered approach that utilizes inter-group dynamics. Consequently, these stakeholders and educational leaders form domains to address the issue of safety. Inter-organizational domains are defined as "functional social systems that occupy a position in social space between society as a whole and the single organization" (Trist, 1983, p. 270). This approach focuses on the significance of all participating organizations in creating a collaborative atmosphere rather than focusing on the single, limited perspective (Trist, 1983; Gray, 1985). Creating inter-organizational groups is one manner of reducing confusion and conflict among stakeholders and is in the second organizational level.

Goldring (1995) describes the second organizational level as tactics that are used to balance autonomy and dependency. These strategies include cooperation, contracting, co-optation, coalition building, and socialization.

Understanding power. Educational organizations that participate in boundary spanning require sensitivity to and an understanding of the dynamics of power. In order to remain autonomous yet cope with dependency relationships, organizations are mindful of who benefits in the relationship, what are the perceived advantages and disadvantages of the relationship, and what do the partners compete for as they collaborate (Rogers, 1995). The complexity of boundary spanning requires organizations to have an understanding of knowledge and have training in how to use power and authority to effectively position, protect, promote, and partner with organizations in the external environment (Litchfield, 2006).

Spanning for information. Through boundary spanning, educational leaders are exposed to large amounts and types of information. They must control this insurgence of information to protect the school from stress and other external interferences. School organizations are better prepared when they are acting in tandem with elements in their environment and utilizing implicit cooperation without explicitly trying to coordinate behaviors (Goldring & Rallis, 1993). Increased national attention to the problem of creating a stable, safe learning environment has prompted educational leaders, emergency management directors, public health officials, mental health officials, medical care officials, emergency management officials, law enforcement officials, fire management officials, homeland security officials, transportation management officials, and others to press for answers to two central questions: 'Could we have known about the risk?' and, if

so, 'What could we have done to prevent and manage the risk?' The publication, *Threat Assessment in Schools: A Guide to Managing Threatening Situations and to Creating Safe School Climates*, is the product of an ongoing collaboration between the U.S. Secret Service and the U.S. Department of Education. This study's focus was on the use of the threat assessment process pioneered by the Secret Service as one component of the Department of Education's efforts to help schools across the nation create a stable, safe learning environment (Fein, Vossekuil, Pollack, Borum, Modzeleski, & Reddy, 2002).

The Secret Service Threat Assessment Approach is a process of identifying, assessing, and managing the threat that certain persons may pose. The goal of the threat assessment is to intervene before the incident occurs. This assessment is an example of an inter-organizational collaboration developed within the school safety and security planning process. Past incidents have proven that schools may be the target of a certain person who posses a risk, and that they are certain to be affected by natural disasters, terrorism, violence (shootings, drug overdoses, suicides), pandemics, and other risk situations.

There is no limit to the devastation resulting from a risk event that transforms into a crisis. Even though not all events involve casualties, long-lasting psychological reactions may be expected. In most events, economic damage and societal dislocation are particularly prominent as risk-related consequences. In 2005, after Hurricane Katrina, New Orleans' public school districts and non public schools were closed for a considerable amount of time, resulting in the release of students from yearly tuition cost, as well as teachers from yearly salaries. This economical damage and societal dislocation impacted several schools causing educational leaders to rethink contingency planning. In

contingency plans, the organizational aspects of risk relief are described and planned. For an adequate school safety and security planning process, more specific risk relief plans must be available, describing how to handle the aftermath of different types of disasters.

United States, and crisis can and have devastated thousands of adults' and students' lives. The ever-expanding role of an educational leader to maintain a safe, stable learning environment is challenging. Yet school safety and security planning and problem solving in this domain is rarely taught and is often overlooked. The impact of a risk can often be reduced if leaders take the time to understand the relationship of risk to their specific organization. However, initiating inter-organizational collaboration is dependent on the educational leader's ability and willingness to permeate existing barriers and have a pluralistic world-view (Alexander, 1995; Alderfer, 1980). Establishing a learning organization that utilizes a systemic approach, utilization of environmental scanning and boundary spanning through inter-organizational collaboration, and the understanding of role of risk analyst are key components to an effective school safety and security planning process (Huxham, 1996; Barton, 2000; Linden, 2002).

The risk to a stable, safe learning environment is the impending epidemic, the lurking environmental disaster, the safety catastrophe, or the unthinkable violent act just waiting to happen. Consequently, with the knowledge and understanding of the leader's perception of risk, he or she can help define the risk as an objective reality that can be measured, controlled, and managed within the system.

Risk Perception

Cognitive Theories

Perceptions of risk have been and continue to be studied from a variety of methodological and theoretical perspectives. The findings often relate to the understanding of the role that knowledge, personality, politics, economics, and culture attribute to an individual's perceptions. Educational leaders who study and apply these theories understand that "risk does not exist 'out there,' independent of our minds and culture, waiting to be measured. Human beings invented the concept of 'risk' to help them understand and cope with the dangers and uncertainties of life. There is no such thing as 'real risk' or 'objective risk'" (Slovic, 1993, p. 119). The distinction between knowledge and awareness is important in understanding risk perception. The most widely held theory of risk perception is the knowledge theory: the notion that people perceive things to be dangerous because they know them to be dangerous (NRC, 1989). Therefore, if knowledge is predictive of concerns about risk, perceptions of danger should match with what individuals know about the risk. However, this is not always the case.

Another commonly held theory of risk perception is *personality theory*: the idea that stable individual differences among persons are systematically related to their perception of danger. If this theory was always correct, traditionally assessed attributes of personality (intra-psychic dynamics, interpersonal traits, personal values, cognitive capacities and styles, attitude orientations, and psychopathologies) should be systematically related to risk perception in predictable ways (Dake, & Wildavsky, 1991). Again, this is not always the case.

These cognitive theories assume that the mind is analogous to a machine. However, if this were the case, there would be no need for sharing of ideas, or collaboration for the risk communication process. These theories would obscure "not only the symbolic, meaning-making and emotive realms, but also the inter-subjective qualities of the human experience" (Joffe, 2003, p. 58). Although, researchers originally viewed risk perception as a deliberative, analytic information process, more recent findings recognize its dependence on intuitive and experiential thinking, guided by emotional and affective processes (Slovic, 2000).

Social amplification of risk. To further the understanding of risk perception, the social amplification of risk has become a guiding factor. The social amplification of risk is a person's perception of risk played out by forces external to individuals, rather than intrapersonal processing. This framework strives to link systematically the scientific assessment of risk with psychological, sociological, and cultural perspectives of risk perception. Amplification indicates the process of intensifying or attenuating a signal/message during the transmission of information from the communicator to intermediate transmitters, and then to the receiver/audience. The signal/message is then decoded by the receiver/audience so that the message is understood. The transmitter alters the original message by intensifying or attenuating, and sending a new message to the receiver/audience. The transmitter structures the messages that go to a receiver. The receiver, then interprets, assimilates, and evaluates the message. The social amplification of risk indicates that "the phenomenon by which information processes, institutional structures, social-group behavior, and individual responses shape the social experience of risk, thereby contributing to risk consequences" (Kasperson, Renn, Slovic, Brown, Emel,

Goble, Kasperson, & Ratick, 1988, p. 181). Social experiences of risk, both in direct personal experience and in indirect, through information received about the risk, risk events, and management systems may heighten the perception of risk or mitigate the perception of risk.

One aspect of the social amplification of risk that influences a person's perception relates to *political theory*: the analysis of individual policy orientation toward safety and the environment within the broader context of political party agendas or of contemporary social movements. The primary explanatory power is placed on variables such as gender, age, social class, occupation, liberal-conservative ideology, and the like. This aspect is also interwoven in cultural theory.

and how much to fear it, in order to support their way of life. From these choices individuals perceive their action through "specifically, hierarchical, egalitarian and individualist forms of social relations, together with the cultural biases that they justify, are each hypothesized to engender distinctive representations of what constitutes a hazard and what does not" (Dake, & Wildavsky, 1991, p. 17). The cultural theory of risk seeks to understand risk perception and risk-related behavior in terms of the lifestyles of those doing the perceiving. The culture in which the risk communication is being defined becomes the guiding factor for the risk communication process. Anthropologist Douglas (1992) and her associates Douglas & Wildavsky (1982) highlight that there are different ways of approaching risk that are culturally defined, because risk perceptions are made through the filter of shared expectations and conventions. Therefore, perceptions are products of culture arising from institutional upbringing, and risk has an inherently moral

classification. Making sense and making decisions are issues of culture, and culture is a principle contributor to the risk communication process. Despite ongoing debates, recognition of the social and cultural dimensions of risk is now a part of policy making in government and industry.

Dake & Wildavsky's (1991) study of individual differences in risk perception and risk taking preferences acknowledges that risk perceptions have little to do with knowledge, are modestly related to personality, and are more strongly related to political orientation and cultural biases. More recently, overviews of disciplinary perspectives on risk have been completed that have developed a multidisciplinary taxonomy of risk perspectives. These overviews are built on economic conceptualizations of risk that distinguish uncertainty from risk and argue that risk is an ordered application of knowledge to the unknown. Each of the disciplines gives a particular knowledge approach with which to confront the unknown and therefore understand risk (Althaus, 2005). Therefore, risk perceptions derived from decades of research determine that anxieties, fears, and responses are based upon factors other than 'objective' risk itself (Pidgeon, Kasperson, & Slovic, 2003).

There exists significant interpretive/interactive literature, which illuminates the detail of risk-related practices in specific organizational and social settings. Management of high-risk technology, hospital hazards, regulatory practices, HIV-related behavior, probation, and psychiatric practice, just to list a few, illustrate this range of work. The perspective that emerges from this work is one in which risk issues are embedded in a 'tangle' of perceptions, associations, and sometimes, unrelated agendas. In order to make sense of such issues people draw on shared interpretive resources (Horlick-Jones, Sime,

& Pidgeon, 2003). As demonstrated in this literature, the risk communication process is talked into existence interactively, in ways that reflect and re-form political agendas, cultural agendas, values and power relations.

Social amplification of risk framework. In 1988, the social amplification of risk framework (SARF) was introduced by Clark University (Kasperson, Kasperson, Renn, and colleagues) researchers and Decision Research (Slovic and colleagues). It was developed in response to the emergence of multiple perspectives in the rapidly growing risk literature (Pidgeon, Kasperson, & Slovic, 2003). According to Kasperson (1992) there were key disjunctions which dominated the field: disjunction between technical and social analyses of risk; disjunction among the social sciences themselves; disjunction between the older natural hazards social sciences and the newer technological hazard social sciences; and disjunction over scientific and other claims to knowledge. This disparity provided motivation for the work that led to the formation of SARF.

The framework is an attempt to overcome the fragmented nature of risk perception and risk communication research by developing an integrative theoretical framework capable of accounting for findings from a wide range of studies, including: media research; the psychometric and cultural schools of risk perception research; and studies of organizational responses to risk. The framework also offers a description of the various dynamic social processes underlying risk perception and responses (Pidgeon, Kasperson, & Slovic, 2003). The social amplification of risk framework has become a key part of the understanding of the communication process, which focuses on how "risk, risk events, and the characteristics of both become portrayed through various risk signals (images, signs, and symbols), which in turn interact with a wide range of psychological,

social, institutional, or cultural processes in ways that intensify or attenuate perceptions of risk and its manageability" (Kasperson, Kasperson, Pidgeon, & Slovic, 2003, p. 15).

At this date, there has been no systematic exploration of how SARF can be applied to various public policy matters. However, there is a need for the risk communicator to search for and suggest approaches and processes that have the potential to improve his or her ability to anticipate, diagnose, prioritize, and respond to the continuing flow of risk issues that confront the risk communication process.

Measuring the Perception of Risk

By focusing on the school safety and security planning process, this study advocates that attention be given to the perception of risk held by the educational leader. When the reality of a risk is determined by the educational leader's knowledge of and perception of a risk, then personal judgment becomes the critical focus of attention.

The psychometric study/paradigm. The perception of risk is considered important because it has the potential to influence people's intent to seek out, assess, and manage risk situations. Risk is conceived as a construct with multiple contributing variables: familiarity with the risk, hazardousness of the risk, likelihood of injury, severity of injury, etc. The *Psychometric Paradigm* developed by Slovic, Fischhoff and Lichtenstein in 1978 is the most common manner of determining the perception of risk by using numbered, Likert-type scales. The psychological empirical risk research began as a study of the different risk and hazardous activities conjointly. Starr (1969) developed a method to weigh the benefits of technologies against their risks. Although Starr's research was criticized by Fischoff, Lichtenstein, Slovic, Derby, & Keeney (1981), he concluded that voluntary risks have a much higher level of acceptability than do involuntary risks.

political, social, and cultural situation at the time) does not necessarily imply the risks of new, yet unknown technologies will be acceptable in the future.

Further studies (Fischhoff, Slovic, Lichtenstein, Read, and Combs, 1978; Rethans, 1980; Godfrey, Allender, Laughery, & Smith, 1983; Karnes and Leonard, 1986; Wolgalter, Desaulnier, & Brelsford, 1987; Dasaulniers, 1989) were performed that focused on identifying similarities and differences in the risk perceptions of people. These analyses were used to determine the nature or composition of risk perceptions as well as the risk perception itself. These indicated that risk has a different meaning to different groups. These differences were particularly clear in a comparison of risk assessments made by experts and lay people (Slovic, 1987). Slovic's research found that when experts judged a risk, their perception was strongly related to objective risk indicators. Yet, the risk assessment for laypersons was determined by subjective risk characteristics. Vlek & Stallen's (1981) research focused on the relationship between the perception of an activity's benefits and its perceived acceptability. This study emphasized that both perceived risks and perceived benefits might be relevant judgmental factors in decision-making about hazardous technologies.

Through these and more recent studies, it has been determined that the perception of risk is an influential intervening factor between receiving and responding to warning information. Risk perceptions are affected by a person's perception of his or her ability to control hazards (Laux & Brelsford, 1989; Ferraro, Livingston, Quick, Stogsdill, & Toms, 2004). Risk communication information works through people's cognitive processes to influence behavior. Thus, a challenge to any risk communication process is to disseminate information that leads an audience to 'accurate' cognitions and risk

perceptions, and then to protective actions. These perceptions are shaped by two kinds of forces: the characteristics of the information receiver and those of the information itself (Mileti, Fitzpatrick, & Farhar, 1992). As stated previously, what individuals or societies perceive as risk and decide to choose to concern themselves as risk are not shaped only by the objective state of risk, but are shaped by social, cultural, and political factors – as well as the precision of their analytic tools for identifying risk in the first place (Eiser, 1994; Rosa, 2003).

In 2004, Ferraro, Livingston, Quick, Stogsdill, and Toms completed the research study entitled Preparedness in America's Schools: A Comprehensive Look at Terrorism Preparedness in America's Twenty Largest School Districts. One conclusion from this study indicated that the largest contributing factor for a school to fall into the failing category was the resolve (perception) of each school system's administrator to take preparedness seriously.

The epistemological perception of risk. The psychological investigation of the perception of risk places the decision maker as the focal point, forcing his or her analysis to concentrate on the abstraction of risk and the knowledge that is available concerning this risk. Therefore, different perceptions of risk result in varying risk constructs. Comparison of these constructs is then conducive to a holistic approach to decision making concerning the risk communication process. By perceiving a risk, the decision maker is attempting to 'control' the unknown by applying knowledge based on the orderliness of the world. By comparing perceptions of risk, the decision maker is also attempting to gather even more knowledge to further the risk communication process.

Thompson (1986) defines epistemological risk as one that is a reality by virtue of a judgment made by a person or the application of some knowledge to risk. This includes subjective risk, observed risk, and perceived risk. Subjective risk being the mental state of an individual who experiences uncertainty or doubt or worry as to the outcome of a given event; observed risk being the measurement of that combination obtained by constructing a model of the real world; and perceived risk being the rough estimate of real risk made by an untrained member of the general public (Althaus, 2005).

The analysis of the perception of risk in the area of education falls under the epistemological perception of risk and contains the discipline of science and medicine. This discipline revolves around the idea that risk can be measured, controlled, and managed. Risk is the impending epidemic or disease, the lurking environmental disaster, the safety catastrophe just waiting to happen, the personal risk needing attention. The understanding is that the application of knowledge, uncovering of facts, and remedial actions or anticipatory measures put into place will harness risk and put fear to rest. Science, and its ability to objectify risks, is relevant as a valid and accepted manner of obtaining reliable information. However, science is not value-neutral, nor is risk analysis.

The psychological analysis of the perception of risk in the area of education focuses on an individual's complexity and interplay between reason and rationality and the influence of affect and emotion in decision-making and the comprehension of risk. When aligned with scientific precision, and behavioral and cognitive context, psychological investigation becomes a comprehensive assessment and management science. This aspect of risk perception and cognition are steeped in culture, and values.

When behavioral and cognitive context and psychological analysis are acknowledged, subjective and objective perceptions of risk are put to practical use.

The School Safety and Security Planning Process

The school organization's need for a school safety and security planning process is motivated by the 'subjective' characteristics of hazards and risks. These subjective characteristics are relevant for risk judgment, risk attitudes, cognitive and affective reactions to risks, and the individual's assessment of his or her own possibilities to cope with life-threatening events (Gutteling & Wiegman, 1996). The school safety and security planning process incorporates these subjective characteristics and is a form of communication that is represented by the traditional communication model (e.g., informing, persuading, listening, negotiating, comforting, self-expressing, and entertaining). It contains a source of communication that generates a message that goes through a channel to a receiver. Even to this day, these components have remained constant. However, when developing a school safety and security plan, communication efforts are essential to inter-organizational collaborations.

During the 1980s and the 1990s, the National Research Council (NRC) funded extensive studies focused on the effective communication of risk. From the multiagency panel of experts came several conclusions: (1) risk communication can be defined as the 'interactive process' of exchange of information and opinions among individuals, groups, and institutions concerning a risk or potential risk to human health or the environment, (2) risk communication is a process by which scientific organizations disseminate technical information and gather information about the opinions and concerns of nonscientific groups, (3) risk assessment should be directed toward informing decisions and solving problems, and that the consideration of the social context of the risk should

start from the very beginning of the risk assessment and continue through management and communication (NRC, 1989, 1996).

The implication for those who participate in the school safety and security planning process is that any form of successful risk communication must incorporate exchange of information, opinions, and the participation of stakeholder groups from the beginning. In order to adequately address the special needs of children, public and mental health agencies, and other emergency responders must be involved in the planning process. The best way to address the needs of schools is through collaboration between public health, mental health, medical care, emergency management, law enforcement, fire, homeland security, and transportation ("Journal of School Health," 2004).

It is important that those that are analyzing a risk take the stakeholders' perception of risk seriously, recognizing their right to participate in risk decisions, and working to enhance their capacity to understand and evaluate risks (Kraft, 1991). Risk communication involves people in all walks of life – educational leaders, emergency management directors, counselors, nurses, parents, children, legislative representatives, administrators, regulators, scientists, farmers, industrialists, factory workers, writers, and more. However, to communicate effectively with an audience, the communicator must understand what the audience already believes about the risk. This understanding can be explained by various approaches. These approaches are communication research methods in themselves, and have grown out of research in fields other than communication, and are based on traditions across disciplines (Lundgren & McMakin, 2004).

According to Lundgren & McMakin (2004) there are twelve common approaches to risk communication. These include the following approaches: communication process, National Research Council's, mental model, risk communication, convergence communication, three-challenge, social constructionist, hazard plus outrage, mental noise, social network contagion, social amplification of risk, and the social trust approach. Although there is no one approach that can be applied to every school safety and security plan, understanding the various approaches and their implications can greatly enhance the process.

Risk/benefit balancing. What is an appropriate and reasonable allocation of resources aimed at risk management? One approach to the management of risk is centered on the basis for rational discourse concerning the level of safety in relation to the benefits of the management of the risk. When considering a quantitative assessment and its coherent framework, weighing the options and resolving the problems inherent in the management of risks and the formation of safety policy become a reliable process (Nathwani, Lind, & Siddall, 1991). The debate about allocation and availability of educational funding for school safety and security planning may be driven by the educational leader's perception of risks combined with his or her desire and ability to reach beyond the boundaries of the internal school environment.

The management of risk often involves the reallocation of funds. This change in 'risk dollars' has many consequences; some of them beneficial while others are not. This decision requires an integrated system that covers the entire range of risks. A systematic approach is needed when considering all the important consequences, both direct and indirect, and to make a balanced comparison of all the benefits and liabilities of a course

of action. Such a process should provide a basis for improving risk management practices. Social scientists strongly support benefit-cost analysis as they often have the principle policy responsibilities (MacCorkle, 1994). When a learning organization is established that utilizes inter-organizational collaboration strategies of environmental scanning and boundary spanning, the perceptions of educational leaders become more focused on the school's safety and security planning process. This process then leads to the establishment of appropriate funds to be utilized for the continuation of a safe, secure learning environment.

In August of 2006, over \$23 million in grants were awarded to 74 school districts in 26 states to help them enhance and fortify their emergency response and crisis management plans. The Emergency Response and Crisis Management program provides funds to help education agencies prevent or mitigate, prepare, respond and recover from crises. Funds can be used to train school personnel and students in crisis response; communicate emergency responses and reunification procedures to parents and guardians; coordinate with local emergency responders, including fire and police; purchase equipment; and coordinate with groups and organizations responsible for recovery issues, such as health and mental health agencies. School districts must also commit to developing a written plan designed to prepare for a possible infectious disease outbreak, such as an influenza pandemic (USDOE, 2006).

Modeling the School Safety and Security Planning Process

The theoretical framework for this study is derived from three distinct, yet overlapping areas of focus. The learning organization literature supports the idea of shared responsibility for the risk communication process and provides an essential link in

the establishment of a systemic approach that relies on inter-organizational collaboration (Senge, 1990; DeJoy, 1999; Sergiovanni, 2006). The inter-organization collaboration literature, which focuses on environmental scanning and boundary spanning, recognizes the importance of forming alliances before a risk occurs, and demonstrates a commitment to address the complexity of the process of developing an exemplary school safety and security plan. The perception of risk literature indicates that educational leaders may have great difficulty in perceiving, structuring, and processing information in complex decision-making situations such as risk assessment, and management (Blau & Scott, 1962; Gray, 1989). These overlapping theories provide a framework for this study.

A matrix is utilized to build a systematic, logical, and integrated account, which includes specifying the nature of relationships between significant events and phenomena. It is a diagrammatic representation of a set of ideas. The interplay between conditions, the responses of actors, and the consequences that result is what the matrix captures (Strauss & Corbin, 1998).

Displayed in Figure 1 is a desirable end result of an exemplary school safety and security planning process based on the interplay between macro level statutes, micro level perceptions, and the meso level inter-organizational collaboration. Macro level statutes are established at the highest level of authority, which are the federal and state levels. The meso level, for this study, is referred to as the middle level where the school safety and security planning process comes to fruition. At the micro level, the educational leader's individual perception of risk is the contributing factor. Although this level is small in comparison to the macro level, it has a great impact on the process.

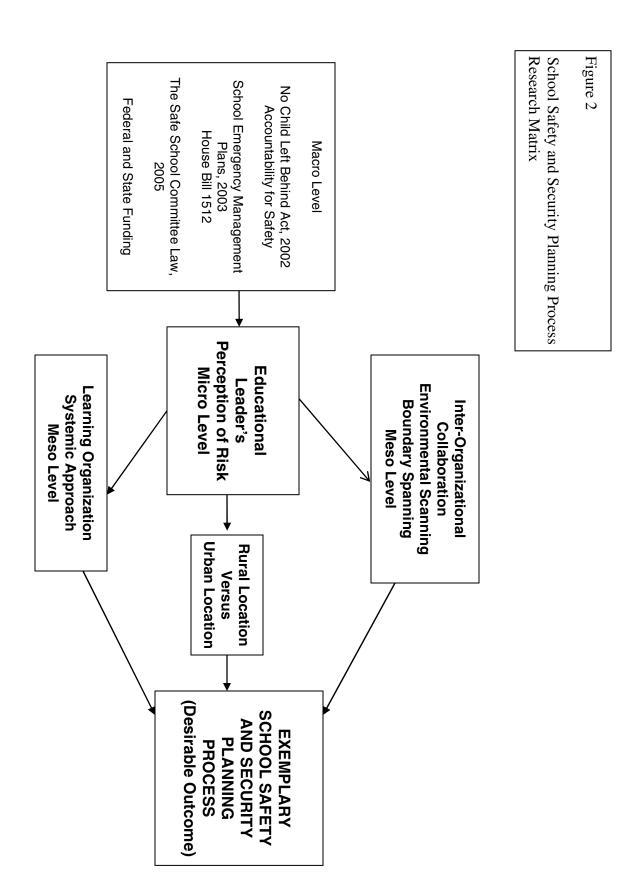


Figure 1 is a conceptual guide that traces a conditional pathway leading to the development of exemplary school safety and security plans. At the left of the research matrix are the current federal and state statutes that guide the school safety and security planning process. By following the solid arrows the pathway indicates possible direct effects related to the school safety and security planning process.

From a grounded theory approach, the three most important criteria for the completion of the school safety and security planning process is that it be viewed as an integral part of the overall system design process (systemic approach), that the interorganizational collaboration strategies of environmental scanning and boundary spanning are utilized, and that the educational leader's perception of risk is well developed. When dealing with risks, assessment and management should be a priority not an afterthought phenomenon. The single pointed, solid arrows coming from the educational leader's perception of risk indicate that his or her perception of risk (heuristics) may influence interplay between the school safety and security planning process, state and federal statutes, state and federal funding, the development of a systemic approach, and the utilization of inter-organizational collaboration to establish exemplary school safety and security plans.

For this study, public school educational leaders at the district level and non public school leaders were interviewed to reveal if their school safety and security planning process utilizes a systemic approach, utilizes inter-organizational collaboration, and to reveal their perception of risk

Ensuring a stable, safe learning environment is a complex task, as is establishing an effective school safety and security planning process. Therefore, a learning

organization that utilizes the inter-organizational collaboration processes of environmental scanning, and boundary spanning enhances the possibility of recognizing risk events that are adequately perceived, assessed, and managed within a well-designed system.

Research Questions/Theories

Learning Organization – Systemic Approach

Emphasis on the utilization of a systemic approach was one focus for this study of the school safety and security planning process. By utilizing a systemic approach, the leader can structure the details of the school safety and security planning process into a coherent picture of the forces at play. A systemic approach encourages others to join in the process and search for unfamiliar solutions. The determination of the utilization of a systemic approach was obtained through the interview questions that focus on the school safety and security development process. From the responses to these questions, the researcher then determined if a systemic approach existed, and if the process was more comprehensive when a systemic approach was utilized.

Research Question 1: How is the school safety and security planning process enhanced when educational organizations utilize a systemic approach?

Inter-Organizational Collaboration

Another focus for this study placed emphasis on how exploration limited to inside organizational boundaries impacted the school safety and security planning process. If the school safety and security planning process was limited to exploration within the existing organization, it was possible that the leader and his or her coworkers established that there was no potential for risk within the organization, or that potential risks were not

credible. The limitation of exploration inside organizational boundaries could have created a collective closed-mindedness to new information, and pressures within the organization towards conformity to the majority view. This often leads to observable decision making defects, including incomplete searches for new information, biased appraisal of available information, and a failure to work out contingency plans to cope with uncertainties. Interview questions relating to the existing school safety and security planning process, training, and current school safety and security management demonstrated this possibility.

Research Question 2: Why is the school safety and security planning process less comprehensive when educational organizations limit explorations to internal networks?

Current research indicates that the inter-organizational collaboration strategies of environmental scanning and boundary spanning may enhance the focus of the school safety and security planning process. Therefore, educational leaders who understand and utilize these strategies may be better prepared for a risk situation, better able to enhance the process, and better able to maintain a more stable and safer learning environment. When safety experts' recommendations from inside and outside of the educational leader's main contacts were taken into consideration, acceptable-risk events were recognized, planned for, and managed. By encouraging inter-organizational collaboration in the school safety and security planning process, educational leaders may be able to combat groupthink and refocus their attention to new theories and resources. Therefore, it is imperative for educational leaders to understand that experts perceive risks and risk management differently, and that they utilize inter-organizational

collaboration (Bouleris, Collett, Mauntler, & Ray, 2003; Journal of School Health, 2004; Colgan, 2005; Della-Giustina, Kerr, & Georgevich, 2000). Interview questions related to the school safety and security development process, training, and current school safety and security management demonstrated this possibility.

Research Question 3: Why is the school safety and security planning process more comprehensive when educational leaders utilizes inter-organizational collaboration?

Risk Perception

The relationship between an educational leader's perception of risk and the school safety and security planning process is an important factor in this study. To respond appropriately to any risk, the educational leader must have a reasonably accurate appreciation of the nature and magnitude of the risk involved. Overconfidence and optimism are sources of bias that are particularly relevant, as are a lack of concern and personal judgmental rules. Interview questions related to the school safety and security development process, training, current school safety and security measures, and the perception of risks survey offered insight into this relationship.

Research Question 4: What is the relationship between educational leaders' perceptions of risk and the school safety and security planning process?

Geographic Dimension

The final area of emphasis for this study related to the dimensions that distinguish rural and urban public school districts' and non public schools' school safety and security planning process. Current research reports that there are important deficiencies in school emergency/disaster planning. This research indicates that rural districts are less well

prepared than urban districts (Graham, Shirm, Liggin, Aitken, & Dick, 2006). Like all schools, rural schools face many pressures. New federal and state accountability requirements, and debates about the allocation and availability of education funding are difficult challenges. Rural schools also face a unique set of challenges, largely due to geographic isolation. Although past educational research is driven by a belief that there is quality inherent in rural communities and schools that should be preserved (Khattri, et al., 1997), this viewpoint has not been substantiated by rigorous studies (Arnold, Gaddy, & Dean (2004). Perhaps an educational leader's desire for certainty is the denial of the risk and its consequences. Such denial is illustrated by educational leaders who often view their world as either perfectly safe or predictable enough to inhibit worry. However, the desire for certainty is not limited only to rural public school districts and non public schools.

Research Question 5: What are the dimensions distinguishing rural and urban public school districts' and non public schools' safety and security planning process?

Summary

Review of the literature related to the theories of the learning organization (systemic approach), inter-organizational collaboration (environmental scanning and boundary spanning), risk perception, and demographic location has yielded several findings. The literature demonstrated that current responses to maintaining a stable, safe learning environment include the need for effective, practical school safety and security planning (Garrett, 2005, Ong, 2003, Sokoloff, 2000, Owens, 1999). Risk perception, risk assessment, and risk management are critical to establishing and maintaining a stable, safe learning environment in any school. Terrorist attacks throughout the world, natural

disasters, pandemics, as well as daily risk situations such as suicides, shootings, drug overdoses, abuses, rapes, and other forms of violence and disaster, have an immediate impact on what happens in a classroom, and the effects of these events will likely be felt for years to come.

No clear model exists for addressing all risks, but scholars increasingly urge educational leaders to include stakeholders' expert knowledge when assessing risks and developing the school safety and security planning process (Blau & Scott (1962); Gray (1989); Senge (1990); Choo & Auster (1993); Goldring (1995); Argyris (1999); Sergiovanni (2006). When a systemic approach is established, the school safety and security planning process is seen as an integral part of the system. By utilizing environmental scanning and boundary spanning, the educational leader is utilizing an inter-organizational collaborative approach that looks for and blends the tools of different stakeholders (Trist, 1983; Hardy & Phillips, 1999; Black *et al.*, 2002; Hardy, Phillips, & Lawrence, 2003; USDOE, 2004; National Association of School Nurses, 2005). Through this process expert knowledge and objective judgments become a major component in the school safety and security planning process.

The National School Safety and Security Services, American Red Cross, and The National Advisory Committee on Children and Terrorism strongly suggest that heightened school safety procedures should be in place to respond to natural disasters, violence, terrorism, pandemics, and tragedies that could potentially destroy a stable, safe learning environment (National School Safety and Security Services, n.d.; American Red Cross, 2002; National Advisory Committee on Children and Terrorism, 2003). As early

as 1974, mandated crisis counseling for all victims of disasters was imposed across the U.S. However, not all schools are diligent in offering this necessary step.

CHAPTER III

Methodology

This chapter is a presentation of the research design and the research methodology applied to the study of the school safety and security planning process. This chapter describes the methodology, the participants of the study, procedures used, and data analysis.

Research Context

This study followed Yin's (2003) case study method that is "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). A multiple case study enhanced the understanding of the school safety and security planning process, events, practices, procedures, actions, and risk perceptions that influence the creation and maintenance of a stable, safe learning environment.

The theoretical framework for this study derived from the concepts of the learning organization (a systemic approach), inter-organizational collaboration (boundary spanning and environmental scanning), and risk perception. The researcher's background in education and interest in creating and maintaining a stable, safe learning environment provided an important source of insight, theory, and data about the area of study (Corbin & Strauss, 1990; Marshall & Rossmann, 1995).

A qualitative/mixed methods study was used. Multi-organizational representation established a comprehensive sampling to validate measurements. Qualitative research provided a method to employ an inductive research strategy (Merriam, 1998). Grounded theory sought to uncover relevant conditions, and to determine how the actors responded

to changing conditions and to the consequences of their actions (Corbin & Strauss, 1990).

Quantitative methods provided the fundamental connection between empirical observation and mathematical expression of quantitative relationships.

Validity and Reliability

Trusting the research results of qualitative research methodology was approached by making issues of validity and reliability a priority. One of the preferred ways, and the most well known method, was through triangulation. Triangulation involved using multiple sources of data to reach conclusions within the study (Merriam, 1998). It was a form of cross validation. In this study, the collection and analysis of data from documents, interviews, and surveys was designed to triangulate the researcher's findings. In additions, utilizing multiple sites served to determine if there was a consensus from data collection as well as the triangulation of data (Hamel, 1994).

Merriam (1998), states that "reliability refers to the extent to which research findings can be replicated" (p. 205). However, she also states the researcher should focus on whether the results are consistent with the data collected. There are three factors to ensure the results are dependable. First, the researcher's position should be known, second, triangulation should be incorporated, and third, an audit trail should be left by the researcher. These three steps were incorporated into the study.

The usage of procedures of data collection and analysis systematically and sequentially enabled the research process to capture all potentially relevant aspects of the topic as soon as they were perceived. The research process itself guided the researcher toward examining all of the possibly avenues of understanding, thus allowing for discovery which grounded the theory in reality (Glaser & Strauss, 1967). Each concept

gained its way into the theory by repeatedly being present in interviews, documents, and surveys. Corbin and Strauss (1990) stress that "requiring that a concept's relevance to an evolving theory (as a condition, action/interaction, or consequence) be demonstrated is one way that grounded theory helps to guard against researcher bias" (p. 7).

An inter-coder reliability test was also completed. For the inter-coder reliability test, a random sample of twelve cases was drawn from the larger sample of sixty-two. The sample of twelve for the inter-coder reliability test included four cases from each of the three categories of minimal process, evolving process, and exemplary process. The coders were asked to select three overall categories for the twelve cases. The concepts of learning organization, environmental scanning, boundary spanning, risk perception, and the school safety and security planning process were included on the coding instrument.

For the inter-coder reliability test, three coders (the author plus one graduate student and one undergraduate student) participated. Each coder was given a brief training session to explain the concepts and the coding instructions. Coders received a list of concept definitions, a list of concept indicators, document analysis, interview notes, and risk perception surveys relating to each of the twelve sites, and a coding sheet for each site.

Inter-coder reliability figures were obtained by calculating the agreement of all coders. This was done based on the placement of information within the concepts, naming the categories, and the placement of sites within the categories. Figures were calculated for the agreement based on the majority opinion among the coders. There was a 100% agreement for placement of information within the concepts, 100% agreement for

naming of the categories, and 92% agreement for the placement of sites within the categories.

The Research Participants

The population for this study consisted of public school districts and non public schools located in or within a fifty-mile radius of a large metropolitan area, located within the four states area of Texas, Oklahoma, Arkansas, and Kansas. A sample was taken to achieve proportionate number of schools ranging in population size from 45 to 42,000, which represents rural and urban demographics. This representation allowed for case replications, theoretical replications, and an aggregate comparison for rural and urban location. The sample consisted of forty-seven public school districts and eighteen non public schools. The educational leaders for this study consisted of public school district superintendents and non public school leaders of the above mentioned sample.

The large metropolitan area was selected because of the researcher's familiarity with public school districts and non public schools in this area. The researcher has been in the field of education for over 20 years and has established relationships with many educational leaders throughout this area. It was felt that a higher acceptance rate to be interviewed and return rate from the survey would occur if respondents were familiar with the researcher's study. For purposes of confidentiality, the school districts, schools, educational leaders, community organizations, and any other individuals or organizations were referred to with fictitious names.

Sample and settings. Seventy-seven educational leaders were contacted, with sixty-five responding favorably to participate in the study. Eighteen were non public school leaders and forty-seven were public school district superintendents. Three sites

were used to pilot the study, one non public school located in a large metropolitan area (urban) and two public school districts, one located near the metropolitan area (urban) and one fifty miles away (rural), and were not included in the final study.

Sixty of the interviews with the educational leaders were conducted in person, and two of the interviews were conducted over the telephone. Extensive notes were taken during each interview. Existing school safety and security plans were either, examined on site, or provided to the researcher to be examined off site. The risk perception survey was either, completed and returned to the researcher at the time of the interview, or returned by mail. Triangulation of the data from each document analysis, each interview, each survey, and the demographic information were considered a separate data set for each of the seventeen non public schools and forty-five public school districts.

To offer anonymity in this study, the document analysis of existing plans at each site, and the classification and location were referred to as SiteNPR1 or SiteNPU1 through SiteNPR62 or SiteNPU62; or SitePR1 through SitePR62 or SitePU1 through SitePU62.

Unless noted within a specific case, all public school districts were in compliance with the state laws.

"State law requires all school sites to have Safe Schools Committees of parents, teachers, and students. Such committees are obligated to make annual recommendations to their principals for making schools safer. In addition, all school districts are required to have crisis management plans in place and to review and, if appropriate, update their plans annually. By law, the plan must address how districts will respond to protect student safety in the event of manmade or natural disasters and crises, and the plan must be given to school districts' respective county emergency management offices, so that local law enforcement can effectively and immediately aid districts in crisis situations" (Hickman, 2006, p1).

Instruments for Data Collection

Appendix A is the text utilized for the initial phone call explaining the study and requesting an interview. Appendix B is the informed consent form/introductory letter given to each public school district superintendent and non public school leader at the beginning of the interview. The introduction described the purpose of the study and appealed to the participant's contribution to the study as vital to sustaining a stable, safe learning environment. It was stated in the informed consent form/introductory letter that participation was voluntary and that respondents could stop at any point during the interview or survey.

Existing school safety and security plans and other documents related to school safety and security were analyzed using a rubric. Appendix C is the rubric developed by the researcher from state and federal guidelines and safety authorities for school safety (Trump, 1997, 2000; Indiana Department of Education, 1999; Pennsylvania Department of Education, 2001; NAIS, 2001, 2003; Florida Department of Education, 2002; Virginia Department of Education, 2002; United States Department of Education, 2002, 2004; United States Department of School Safety and Securities, 2004; FEMA, 2005; U.S. Department of Homeland Security, 2005; Oklahoma State Department of Education, 2005).

Appendix D is the interview questionnaire used during the interview process. It contained a detailed and sequential listing of questions. The controlled questions provided specific subject-related data points, thus reducing bias that might occur by the researcher's influence or as to indiscriminate or accidental questions that might draw preconceived conclusions. The researcher developed the interview questionnaire by

utilizing existing information from safety authorities and theorist (Morrison, 1992; Senge, 1994; Senge *et al.*, 2000; Trump, 1997, 2000; Argyris, 1997; Slaughter, 1999; Correia, Zita, & Wilson, 2001; Choo, 2001; Voros, 2001; Hough, and White, 2004; United States Department of School Safety and Securities, 2004; Thomas & Allen, 2006).

Appendix E is the self-administrated survey used to reveal educational leaders' perception of risk to a safe, secure learning environment. There was an optional area at the end of the survey for participant comments. The self-administrated perception of risk survey was adapted by the researcher utilizing an existing survey developed by Slovic, Fischhoff, Lichtenstein, Read, & Combs (1978, 1980).

This study's risk perception survey asked individuals to rate 12 risks/events (12 having the least risk to 1 having the most risk) to a stable, safe learning environment.

The 12 risks/events are (1) attack with firearms, (2) pandemics, (3) bomb threats, (4) alcohol and/or drug use/trafficking, (5) fear/bullying, (6) litigation threats, (7) natural disasters, (8) physical attack/fight, (9) posttraumatic stress disorder, (10) rape/sexual battery, (11) suicide, and (12) terrorism/bioterrorism attack.

The survey also collected information regarding the respondent's perception of the acceptability of the level of risk associated with each risk/event including: Could be Riskier (Not a Concern), It is Presently Acceptable (Concern, No Special Action Needed), and Too Risky to be Acceptable (Extreme Concern – Serious Action Should be Taken).

From the introduction of the survey, and through the interview process, demographic information was collected. This included each respondent's position (public school district educational leader, non public school leader, or emergency

management director), classification of school (public school district or non public school), and location of school (rural or urban).

Research Methods

This study utilized four methods of data collection: (a) document analysis, (b) individual interviews, (c) individual surveys, and (d) demographic information. All sites utilized an identical process to obtain study data. The existing school safety and security plans were analyzed as potential indicators of phenomena, which were then given conceptual labels. Through comparison of incidents and naming like phenomena with the same terms, the researcher accumulated the basic units of the theory. The interview process guided the research by offering a sampling of incidents, events, and happenings that indicated the experience, knowledge, and specific approaches to the school safety and security planning process that educational leaders had in place in their respective school or school district. Concepts that pertained to the same phenomenon were then grouped in the same established categories. These categories became the cornerstone of a developing theory. The surveys were analyzed by comparing similarities and differences as they related to the school safety and security planning process that existed at a specific site and if the educational leader was consistent with their perception of risk compared to actions taken in the development of the safety and security planning process. Although the survey was completed anonymously location of the school and student population were used to determine identification of individual educational leader's perceptions of risk. It was through this continuous theoretical sampling that representativeness and consistency were achieved. Consistency was achieved because, once a concept developed its way into the study through demonstration of its relationship to the

phenomenon under investigation, its indicators were sought in subsequent document analysis, interviews, and surveys. The research was not sampling educational leaders as such, the aim was to build a theoretical explanation by specifying phenomena in terms of conditions that gave rise to them, how they were expressed through action/interaction, the consequences that resulted from them, and variations of the qualifiers.

A document analysis rubric (Appendix C) was utilized for document analysis. Plans to analyze the existing document data included requesting that the public school district or the non public school allow the researcher access to the existing school safety and security plans and related documents either on site, or to be taken and returned at a later date.

During the interview process, the researcher utilized an interview questionnaire (Appendix D). This format focused the interview towards specific content area, prompted dialogue, and allowed for elaboration of ideas. Each interview took approximately 60 minutes.

A self-administered survey relating to the perception of risk was given to each interviewee (Appendix E). The survey was either, completed at that time, or returned to the researcher at a later date. The survey was either, given to the researcher in a sealed envelope, or returned in a pre-addressed and stamped envelope. The completion of the survey took approximately 30 minutes. Demographic information was obtained from the introduction to the survey and through the interview process.

Procedures

Permission was obtained from the Institutional Review Board to conduct the research. An initial phone call was made to fifty-seven public school superintendents,

and twenty-one non public school leaders. Following a verbal commitment to participate in the study, a meeting date was mutually agreed upon. At the beginning of the scheduled interview, an informed consent form/introductory letter was given to the educational leader. By agreeing to be interviewed, the respondent agreed to participate in the study. By returning the survey, the respondent agreed to participate.

The interview process was completed using the predetermined questions related to the existing school safety and security planning process, the existence of a learning organization strategy (systemic approach), inter-organizational collaboration (environmental scanning and boundary spanning), and the leader's perception of risk. The entire interview process, including opening comments, was standardized. The interviews provided face-to-face interpersonal situations that offered several advantages. A properly designed and executed interview often times achieves a completion rate of 85% or higher. The presence of an interviewer increases the preciseness of the respondents' answers. Interviewers can also clarify misunderstandings of interview questions, however, clarifications must be strictly controlled (Babbie, 1999).

Following the interview, the researcher requested existing school safety and security plans and other documents related to school safety and security held by each educational leader. The researcher examined the documents and recorded information that was relevant either on site, or the information was taken and returned at a later date. Document analysis of existing school safety and security plans was used to reveal the school safety and security planning process that specifically relates to the establishment of a systemic approach, utilization of the inter-organizational collaboration strategies of environment scanning and boundary spanning, and the leaders' perception of risks to a

stable, safe learning environment. These documents were coded and recorded on a recording sheet based on the rubric.

At the completion of the interview, the perception of risk survey was provided to the educational leader. The survey was either, completed by the interviewee and given to the researcher, or it was completed at a later date and returned in a pre addressed, stamped envelope to a location independent from the researcher. The survey was used to determine the interviewee's perception of risk as it relates to a stable, safe learning environment. To protect the confidentiality of each respondent, someone other than the researcher opened the survey, coded the survey, and disposed of the mailing envelope.

Pilot study. Document analysis was piloted at one rural public school district, one urban public school district, and one urban non public school. The interview questionnaire was piloted with one educational leader in a rural public school district, one educational leader in an urban public school district, and one non public school leader in an urban area. The perception of risk survey was piloted utilizing the same educational leaders. A total of three cases were used to pilot the survey. The pilot document analysis, interview, and survey allowed for clarification of items and additions or deletions as suggested. An analysis of the pilot data was conducted to assure that the information needed could be compiled.

Timeframe. The research for this entire study took place from October 2006 to January 2007. A summary of the study was made available upon request from the participants. A contact email and address, other than the researchers, was provided to protect confidentiality.

Treatment of the Data

For this type of qualitative/mixed-methods study, the analysis began as soon as the first data was collected. This was necessary from the start so that it could be used to direct the next interview. However, the data collection was standardized. Concepts that pertained to the same phenomenon were grouped to form categories. Concepts were generated through the same analytic process of making comparisons to highlight similarities and differences, thus allowing the theory to be integrated. Tabulation of existing school safety and security plans was completed utilizing a rubric. Details were sorted and retyped for comparison and analysis. Strict coding was utilized to protect the rights and privacy of each public school district and non public school. An analysis was completed of each site's school safety and security planning process by revealing the establishment of a systemic approach, and utilization of the inter-organizational collaboration strategies of environmental scanning and boundary spanning. The researcher placed the data in different arrays and made a matrix of categories placing the information within these categories.

Tabulation of data was completed from each interview questionnaire. The responses were sorted and retyped for comparison and analysis. Strict coding was utilized to protect the rights and privacy of the individuals. All responses were coded and recorded within a matrix. Data was sorted using the categories of learning organization, environmental scanning, boundary spanning, risk perception, and the school safety and security planning process. An analysis was made regarding the establishment of a systemic approach, the utilization of environmental scanning and boundary spanning during the school safety and security planning process, and the leader's perception of

risk. The researcher placed the data in different arrays and made a matrix of categories placing the information within these categories.

Results from the perception of risks survey were averaged across the cases using an aggregated level, where the frequencies for all respondents was compared between risks and location (rural vs. urban), and risk issues. Identification of patterns highlighted similarities and differences, revealed what risk events were considered as most salient to a safe, secure learning environment and what risk events were considered as having the least risk to a safe, secure learning environment. Data was placed in a table using the risk event, and location of school.

Demographic information was also collected. This included each respondent's position (public school district superintendent, non public school leader), classification of school (public school district or non public school), and location of school (rural or urban). This information helped determine if the school safety and security planning process varies between locations. Data was sorted using the above categories. The researcher placed the data in different arrays and made a matrix of categories placing the information within these categories.

Summary

The research design for this study was a qualitative/mixed methods multiple case study and included document analysis, interviews, a survey, and demographic information. The goals of this study were: to reveal the school safety and security planning process in public school districts and non public schools in or within a fifty-mile radius of a large metropolitan area; to reveal the existence or non existence of a systemic approach to the school safety and security planning process; to reveal the utilization of

environmental scanning and boundary spanning in the school safety and security planning process; and to reveal the perception of risk of non public school leaders and public school district leaders.

Chapter IV

Results

This chapter interprets and evaluates the data from each site and each educational leader in relation to the research questions. It also interprets and evaluates the data in relation to the theories of the learning organization, inter-organizational collaboration, risk perception, and rural and urban geographic location.

School Safety and Security Planning Process

Leaders in non public schools and public school districts involved in this study were aware of the fact that their schools are not necessarily the safe havens they were once thought to be. Even though incidents of violence have existed in schools since their inception, recent school shootings and acts of violence in the United States have intensified efforts towards creating and maintaining a safe, secure learning environment. All interviewees stated that the acts of violence that have taken place since the March 24, 1999 shooting in Jonesboro, AR, thrust them into focusing on safety. However, the August 24, 2006 teacher shooting in Essex, VT, the September 27, 2006 student hostage shooting in Bailey, CO, the September 29, 2006 principle shooting in Cazenovia, WN, and the October 2, 2006 student hostage shooting in Nickel Mines, PA, broadened their reflection on how schools must deal with the multitude of emergencies they face during the course of a school year. Respondents from this study offered the following perspectives.

"We never felt at risk until shooting incidents took place across the United States" (NPU1).

"After several incidents took place, we met as a committee and started thinking about other risks that might affect our school" (NPU5).

"We had a feeling of being safe and secure because we are located in a small town, but now we are more aware of outside intruders that we have no control over" (PR1).

"School violence has changed our process, now all sites are involved more in safety" (NPU16).

"It is easy to be lulled into a sense of self-security in a small town, but coming from the city, I am constantly reminded not to become laidback" (PR32).

"It has been like a roller coaster ride with safety planning. Years ago carrying a rifle in your truck did not matter, but now students are suspended for the year if they forget to take their deer rifle out of their truck" (PR26).

"When I started in this job over twelve years ago, we only thought about tornado drills and fire drills. Over the last five years the scenario has changed. Recent incidents have made us change, and refocus more on safety and security" (PR29).

As the data were analyzed, three categories emerged. These categories help illustrate and provide insight into the research questions and to the theories. The data displayed the existence or nonexistence of a systemic approach, utilization of environmental scanning and boundary spanning, and the leaders' perception of risk to a safe, secure learning environment. These categories are designated as: Minimal Process, Evolving Process, and Exemplary Process.

A Minimal Process

A Minimal Process is described as one in which there is little to no systemic approach to the safety and security planning process. The state and federal requirements are moderately met. There is an awareness of safety issues related to the school

environment, but the leader displays lack of focus, including time, money, professional development, inter organizational collaboration, and follow through. A nominal effort has been made by the educational leader to encourage others in the school or district to gain knowledge related to school safety. School Safety Committee meetings are held, but few recommendations are made. A safety plan is in place, but there was little to no contact with outside experts while establishing the plan. There are few to no planned practices of the existing procedures. If a practice is held, no students are involved.

Usually the drills are only talked about during an in-service day with the teachers and staff at the beginning of the year. There is minimal contact with community experts for debriefing after a planned practice, or an unplanned incident. A small number of physical changes have been made to the site. Safety and security planning is something that has to be addressed because of state and federal laws and guidelines. The educational leader takes a reactive approach to safety, and frequently insists that he or she can take care of any incident that might occur. Education leaders that were involved in a minimal process offered these comments.

"I take a stern approach to discipline, and think that I can handle just about any problem that comes up at this school" (PR10).

"Because we are such a small school, and we know all the students, we never felt at risk. We provide a nurturing environment for our students and we know if any of them have problems" (NPU4).

"We know we should change, but we just have so many other priorities at this time. Our money is stretched pretty thin" (PR12).

"Every three or four years an incident outside of our district touches off a refocusing and we work on the plan again" (PR4).

"We took care of that several years ago when we met with a person from The Department of Homeland Security" (PR20)

"We talk about the safety procedures at an in-service day at the beginning of the year. I think the teachers know what to do, but we have never had a practice drill" (PR13).

"We had a person come from The Department of Civil Emergency Management in 2004. He and an officer from The County Sheriff Department and the Fire Department helped us put our plan together. However, we have not done much with it since then" (PR3).

An Evolving Process

An Evolving Process is described as one in which the safety and security planning process is beginning to be built into the existing system (systemic approach). This evolving process may have emerged from the educational leader's new or renewed process on safety stemming from an increase of knowledge through environmental scanning. He or she may be in a new position, or at a new site. The leader may have experienced a threatening incident. The leader has attended professional development seminars, workshops, and has completed research regarding school safety. The leader encourages others within the system to have a more directed process on safety by attending meetings and completing research. The leader is focusing time, money, and professional development towards creating and maintaining a safe, secure learning environment by creating networks within the system, and through inter-organizational

collaboration. Results are visible from updates to the existing safety plan and by physical changes to the site. New money has been acquired through grants or bonds, or by reallocation of existing funds. The existing safety plan has been in place for at least five years. Inter-organizational collaborations are being established in the community with emergency first responders, community leaders, parents, school board members, and others interested in the safety of the school. Lockdown and intruder on campus practice drills are scheduled and completed several times a year. Practice drills take place during the school day with students present. Feedback is given during and after practice drills. The leader is developing a more pro-active approach to safety. The following educational leaders provided these insights.

"Just last week I met with the emergency first responders in the community and they took a look at our plan. They gave us several suggestions on how to become a safer school. We have money from our last bond vote that is earmarked for safety and we will be using it to phase in the changes" (PR2).

"We are establishing long term relationships with the fire department and the police department. We also have connected with parents who have other connections into the community" (NPU16).

"We began preparing the children for the drills several years ago. We look for age appropriate ideas so that they are not scared. We always let the parents know ahead of time so that they can help us prepare the children" (NPU12).

"We had a minimal plan before 9/11 then we took safety seriously. We established a committee made up of a representative from the fire department, police department, health services, first responders, board members, our

maintenance and building and grounds staff, The Department of Homeland Security, parents, students, teacher, administrators, and even graduates" (NPU5). "We have a five year plan in place to upgrade security to our site" (PR27). "Our school is used as a safe haven for the community. To do this we met with Emergency Management, Red Cross, Police, County Sheriff, Fire Department, and others in the community. As we prepared for the community, we also prepared our school" (PR1).

"Three years ago we hired a safety management consultant to evaluate our existing plan. Last week we met with Emergency Management, Police, Fire, Department of Human Resources, safety coordinators, principles, lead custodian, director of the board, and graduates that are parents to continue the dialogue and update the plan" (PR30).

An Exemplary Process

An Exemplary Process is described as one in which the safety and security planning process is completely built into the system. A systemic approach exists. Even though there was a distinguishable surge in the school safety and security planning process after 1999, these sites had a considerable interest in school safety and security planning before 1999. Educational leaders have established a systemic approach to search for knowledge along different dimensions, and have established a network that helps them create and maintain a stable, safe learning environment. Environmental scanning is an ongoing process within the system. Boundary spanning is also an ongoing process within the system. Regardless of the present leader, the process on school safety and security has remained a priority. School safety and security plans were established at

least ten years ago, and have been revised each year. The present leader has attended professional development seminars, workshops, and has completed research regarding school safety. The leader encourages others within the system to have a directed process on safety by also attending meetings and completing research. The leader has focused time, money, and professional development towards creating and maintaining a safe, secure learning environment. Results are visible from updates to the existing safety plan and from physical changes to the site. Continuous funding has been acquired through grants or bonds, or from reallocation of existing money. Inter-organizational collaborations are established in the community with emergency first responders, community leaders, parents, school board members, and others interested in the safety of the school. Lockdown and intruder on campus practice drills are scheduled and completed several times a year. Practice drills take place during the school day with students present. Feedback from experts outside of the inner-network is given during and after practice drills. The leader has a pro-active approach to safety. The leader has created an environment where all teachers', staff's, and administrators' focus on safety has become second nature. All decisions are based on the safety of the students and the adults. A safe, secure learning environment is a high priority. Educational leaders involved in an exemplary process stated that:

"Our first safety and security plan was established in 1988. As the years passed and incidents happened at other schools across the United Stated, we continually added procedures. In 1997, we had our first emergency drill, and have been consulting with experts outside of our school community for continued input" (PU1).

"Each year we invite the police department to come to our drills. Sometimes we get the officers who are also parents. They offer us excellent feedback and give us the most recent information regarding safety. They have also helped us with gang education and intervention" (PR28)

"Our school has a continuous training program. We train the teachers, staff, maintenance department, administrators, and others in safety procedures and first aid procedures" (PR33).

"Not only is our Campus Police Department responsible for our safety, our School Safety and Emergency Response Team goes outside of our district to include local police department, state highway patrol, local fire department, county sheriff department, local ambulance service, and other community leaders" (PR2).

"Ten years ago we had representatives from several local police departments, the Red Cross, the FBI, the fire department, and the airport authority come in to help us establish out plan. Each year we continue to meet so that we can make appropriate changes and updates" (NPU15).

"We hired our first security officer through a grant we applied for. We thought his role was very important, so when the funding went away, we paid his salary. We have now hired four more officers through reallocation of funds" (PR21) "When we made our first plan, we tried to include everyone that could possibly respond to a crisis, even the city utility services. We also had sub committees to look at specific incidents" (PR11).

A summary description of each site combining the data from the document analysis, interviews, surveys, and demographic information is presented in Appendix F.

The summary includes information related to learning organization, environmental scanning, boundary spanning, risk perception, and the school safety and security planning process.

Patterns Among the Cases for the School Safety and Security Planning Process

Frequency Distribution and Percentages

Patterns among the cases are illustrated in the following tables using frequency distribution and percentages. Table 2 illustrates the overall average percentages and frequency distribution for the underlying categories of Minimal Process, Evolving Process, and Exemplary Process. The percentages for each of the categories were averaged to obtain the overall percentage, indicating the school safety and security planning process.

Table 2

Overall Average Percentages and Frequency Distribution for the Categories of Minimal Process, Evolving Process, and Exemplary Process for All Sites (N = 62)

	Overall Average
Minimal Process	35% / 22
Evolving Process	44% / 27
Exemplary Process	21% / 13
Total Sites	100% / 62

Geographic location. Table 3 illustrates the overall average frequency distribution and percentages for the categories of Minimal Process, Evolving Process, and Exemplary Process using the distinctions of Public Rural, Public Urban, Non Public Rural, and Non Public Urban. These percentages indicate the school safety and security planning process compared by geographic location.

Table 3

Overall Average Percentages and Frequency Distribution for the Categories of Minimal Process, Evolving Process, and Exemplary Process for Public Rural, Public Urban, Non Public Rural, and Non Public Urban (N = 62)

	Public Rural	Public Urban	Non Public Rural	Non Public Urban
Minimal				
Process	40% / 16	0% / 0	0% / 0	37.5% / 6
Evolving				
Process	40% / 16	33% / 2	100% / 1	50% / 8
Exemplary				
Process	20% / 7	67% / 4	0% / 0	12.5% / 2
Total Number				
of Sites	39	6	1	16

Risk Perception Surveys

Frequency Distribution and Percentages

Aggregated data. Results from the perception of risks surveys were condensed into a frequency distribution table. However, the frequency distribution table provided clarity at the expense of some information from the data. It was not possible to know from the frequency distribution alone how a specific site rated each risk. Aggregated

across all sites, Table 4 illustrates the frequency distribution and average percentages for each risk as reported by all educational leaders utilizing the categories of Extreme Concern, Too Risky to be Acceptable, and Presently Acceptable.

Table 4

Aggregated Percentages and Frequency Distribution Indicating Respondent Perceptions for Risk as Related to Extreme Concern, Too Risky to be Acceptable, and Presently Acceptable (N = 55)

Risk	Extreme	Too Risky to	Presently	
	Concern	be Acceptable	Acceptable	
Attack With Firearm	47.2% / 26	41.8% / 23	10.9% / 6	
Alcohol/Drug Use/Trafficking	70.9% / 39	16.3% / 9	12.7% / 7	
Bomb Threat	21.8% / 12	47.2% / 26	30.9% / 17	
Fear/Bullying	70.9% / 39	16.3% / 9	12.7% / 7	
Litigation Threat	19.0% / 16	27.2% / 15	43.6% / 24	
Natural Disaster	29.0% / 16	62.7% / 29	18.1% / 10	
Pandemic	18.1% / 10	27.2% / 15	65.5% / 30	
Physical Attack/Fight	69.0% / 38	20.0% / 11	10.9% / 6	
Posttraumatic Stress Disorder	14.5% / 8	34.5% / 19	50.9 / 28	
Rape/Sexual Battery	09.0% / 5	52.7% / 29	38.1% / 21	
Suicide	21.8% / 12	54.5% / 30	23.6% / 13	
Terrorism/Bioterrorism	12.7% / 7	12.7% / 7	74.5% / 41	

Geographic location. The frequency distribution and percentages for all respondents were compared between the risks and a rating of Extreme Concern, Too Risky to be Acceptable, and Presently Acceptable, and Geographic Location (rural vs. urban). Table 5 displays this information.

Table 5

Percentages and Frequency Distribution of Risks for Educational Leaders Compared by Geographic Location and Extreme Concern, Too Risky to be Acceptable, and Presently Acceptable (N = 55)

	Extreme	Extreme	Too	Too	Acceptable	Acceptable
Risk	Concern	Concern	Risky	Risky	Risk	Risk
	Urban	Rural	Urban	Rural	Urban	Rural
Attack With Firearm	54.5%	42.4%	31.8%	48.4%	13.6%	09.0%
	12	14	7	16	3	3
Alcohol/Drug	63.6%	75.7%	27.2%	09.0%	09.9%	15.1%
Use/Trafficking	14	25	6	3	2	5
Bomb Threat	22.7%	21.2%	50.0%	45.4%	27.2%	33.3%
	5	7	11	15	6	11
Fear/Bullying	68.1%	72.7%	27.2%	09.0%	04.5%	18.1%
	15	24	6	3	1	6
Litigation Threat	27.2%	30.3%	27.2%	40.9%	45.4%	42.4%
	6	10	6	9	10	14
Natural Disaster	31.8%	27.2%	54.5%	51.5%	13.6%	21.2%
	7	9	12	17	3	7
Pandemic	18.1%	18.1%	27.2%	40.9%	54.5%	54.5%
	4	6	6	9	12	18
Physical Attack/Fight	63.6%	72.7%	27.2%	15.1%	09.9%	07.2%
	14	24	6	5	2	4
Posttraumatic Stress	22.7%	09.0%	22.7%	42.4%	54.5%	48.4%
Disorder	5	3	5	14	12	16

Rape/Sexual Battery	09.9%	09.0%	45.4%	57.5%	45.5%	33.3%
	2	3	10	19	10	11
Suicide	31.8%	15.1%	45.4%	60.6%	22.7%	24.2%
	7	5	10	20	5	8
Terrorism/Bioterrorism	13.6%	07.2%	09.9%	15.1%	77.2%	72.7%
	3	4	2	5	17	24

Research Questions

Each research question is presented and followed by an analysis of the data that pertains to that question, and to the theories of the learning organization (systemic approach), inter organizational collaboration (environmental scanning and boundary spanning), the perception of risk, and geographic location (rural vs. urban).

Research Question 1: How is the school safety and security planning process enhanced when educational organizations utilize a systemic approach?

Each school's or school district's safety and security plan provided a unique look at the school safety and security planning process as it related to the learning organization strategy known as a systemic approach. A systemic approach was evident when safety had become an integral part of the overall system. The enhancements of the process manifested themselves when the focus on safety became second nature and most decisions were made with regard to safety. The process was funded within the existing budget and was not dependent on specific grants or outside funding. Money for safety was part of the funding process from bond passage. Establishing a systemic approach brought forth the integration of disciplines into a coherent body of theory and practice, thus creating systems thinking. Systems thinking created a systemic approach to safety and security planning and strengthened the ability of the system to shoulder its own

responsibilities towards maintaining a stable, safe learning environment. The educational leader became truly proactive and recognized how the school or school district contributed to its own problem of safety. Within a systemic approach, the leader was going beyond simply becoming more aggressive towards fighting risks to establishing safety as a way of thinking, not an emotional state. Educational leaders that recognized increasingly complex and subtle structures within the school safety and security planning process were seeing through the complexity to the underlying structures of patterns instead of only events and forces to react to. He or she was organizing complexity into a coherent process that helped groups or teams develop shared understanding.

Educational leaders who had not established a systemic approach to safety created a minimal safety and security planning process and perceived most risks as presently acceptable. Educational leaders, who had an evolving systemic approach, had created a more complex safety and security planning process, and perceived risks as too risky to be acceptable. Educational leaders who had established a systemic approach created the most complex safety and security planning process, and continuously perceived many risks as too risky to be acceptable. Educational leaders from the study offer the following insights on these perspectives.

"Safety has become a high priority for us. Even though we looked at other school's plans, we tailored our plan to our sites" (NPU15).

"I have attended several workshop and seminars about safety in schools. I also expect administrators, faculty, and other adults at each site to continue researching safety and security" (PR2).

"One of the most important aspects is safety, and I continually stress this with the board, teachers, administrators, and staff" (PR5).

"It is not a convenience to be safe sometimes, but it is a priority" (PR27).

"At first, we reacted to incidents that happened at other schools, then, we decided safety had to become a priority. After that decision, we think in terms of safety." "We had a large community planning meeting with over 120 present, because we want everyone to know and understand that safety is a top priority for this school district" (PR21).

"It takes a lot of planning and training to keep safety a top priority, and we are willing to see it happen. We are now an incident command center and we learned an extensive amount getting to this level of safety" (PR23).

"Putting safety as a priority has been a systemic cultural shift. We are proactive on all safety issues, especially when we connect with the students" (PR25).

Additional perspectives are given in Appendix G.

Research Question 2: Why is the school safety and security planning process less comprehensive when educational organizations limit explorations to internal networks?

For this study, educational leaders' whose perception of risk was insufficiently developed limited exploration to internal networks. Thirty-five % of those interviewed limited exploration to internal networks, which precluded the process from being based on current research and experts' opinions. Therefore, the process was less comprehensive. Those sites that limited exploration to internal networks were not aware of as many changes that had taken place related to safety practices and guidelines.

Leaders that did not encourage internal or external participation in the process limited the possibilities of changes to the process and to the existing physical site.

Even though exploration was limited to organizational boundaries, environmental scanning did take place through media attention to incidents that had occurred throughout the United States. At all locations, environmental scanning brought forth an increased awareness of safety and security issues as they relate to the school safety and security planning process. However, when further exploration was limited to internal networks, there was limited vision of what was possible. The existing plans revealed that where further exploration was limited to organizational boundaries, the school safety and security planning process was minimal. Educational leaders described a minimal school safety and security planning process from the following perspective.

"Our plan is pretty basic, and we depend on people in the community to call us if they see any suspicious people in town" (PR19).

"Our plan is pretty much like every other school district's plan. We had someone from the state department of education come out several years ago to help us put it together. No, we have not contacted anyone in the community to help us" (PR22).

"We usually wait to see how other schools react to an incident, and then we decide if we need to make changes" (PR4).

"If we practice those procedures, the students will be terrorized, so we just talk about it during our meetings" (PR20).

"I know we need to enhance our plan, but I just cannot seem to get over to the county sheriff's department for our meeting" (PR22).

"One of the hardest issues for us is keeping the parents out of the hall. They want us to be safe, but they don't want to be inconvenienced" (PR24).

"I'm just not sure that safety is a priority over other programs" (NPU1).

"The scariest thing about it is that schools are the safest places, and acts are so random, so how can you really plan for them" (PR35).

"No, I have not been to any conferences focused on school safety" (PR14).

"We watched a video on reducing risks about two years ago, but it was not a requirement, and that's about all we've done" (NPU9).

"We are trying to do something now, but we have not planned for any new measures for this year" (NPU10).

"Our big process is on natural disasters, when we get that taken care of we will see if there is money for other issues" (PR26).

"We had a couple of people who were interested and they attended a workshop, but we never got with them to change the plan" (NPU1).

Research Question 3: Why is the school safety and security planning process more comprehensive when educational leaders utilize inter-organizational collaboration?

When inter-organizational collaboration took place, in the form of environmental scanning and boundary spanning, the emphasis on the school safety and security planning process became more focused and detailed. Through the increased utilization of environmental scanning, a more malleable perception of risk was developed. Through the increased awareness of risk and through actions taken concerning the school safety and security the planning process was enhanced. Consequently, when increased exploration outside organizational boundaries took place, boundary spanning also took

place. Boundary spanning was the initiation of networking, and permitted an interorganizational domain to develop as a systemic approach to the school safety and security planning process. Inter-organizational collaboration became a means of reducing uncertainty, acquiring resources, and solving problems.

Educational leaders who had a more developed perception of risk created a more comprehensive school safety and security planning process. Forty-four % of leaders had created an evolving process, and 21% had created an exemplary process. Within this process they either were developing or had developed a wide network of stakeholders including local fire departments, police departments, sheriff departments, highway patrol, first responder emergency organizations, health facilities, poison control centers, toxic chemical and oil spills centers, mental health providers, crisis counseling teams, clergy, Department of Environmental Quality, American Red Cross, Department of Home Land Security, Federal Bureau of Investigation, civil defense departments, emergency management agencies, city maintenance departments, utility companies, phone services, radio stations, ham radio specialists, television stations, technology centers, food provider services, transportation provider services, parents, school board members, and other school districts and schools. Through monthly meetings, it became apparent that it was imperative that all adopt the same emergency strategies. Eventually the meetings were held on a semi-annual basis, unless an incident needed immediate attention.

Also, from these meetings, came the conclusion that full scale training and practice drills were crucial to the implementation of the school safety and security plan. Members of the broader network offered training sessions at no charge, feedback after practice drills, and utilized the educational facility for training purposes for that specific

organization. Continuous contact with members of the network also enhanced the research process, and encouraged others within the educational organization to become more involved in the safety process. The longer the public school district or non public school had been involved in the process, the more likely it was that a specific person had been appointed or hired that had a direct responsibility for the school safety and security planning process.

Through this interaction, stakeholders collaborated voluntarily, and shared common goals. The existing documents and interviews demonstrated that exploration outside organizational boundaries that utilized inter-organizational collaboration enhanced the school safety and security planning process. This enhancement was evident through the following comments:

"A good thing that happened was the development of good relationships with the local police department, crisis team, and emergency director. The networking and creation of the relationships was the best benefit" (PR11).

"Being proactive by working with others in our community has made safety part of our system now" (NPU17).

"In 2001 we conducted a safety survey, then FEMA came in and it took three days of meeting with the fire department, police department, EMSA, the county emergency management director, and the county sheriff to work around issues. When we were finished, we felt like we had a pretty good plan. Now we meet each year to make adjustments in the plan and to decide what practice drills need to be run" (PR27).

"Our networking with the community has helped us establish a more thorough plan. Now the SWAT Team uses our campus for their training in the summers, and we are helping the city develop a safety plan" (PR29).

"To be honest with you, I have a principle who started the ball rolling for us as far as safety goes. She started meeting with the fire chief, police department chief, EMSA, the school nurses, other principles, school counselors, and others from our community. She helped me understand the commitment it takes to build safety into the system" (PR33).

"Because of our location, and the transient nature of our student population, we have looked at safety and security issues as a priority. Over the years, we have become proactive, and this approach has certainly created a better system to deal with all aspects of safety and security" (PR2).

Research Question 4: What is the relationship between educational leaders' perceptions of risk and the school safety and security planning process?

The relationship between the educational leader's perceptions of risk and the school safety and security planning process was demonstrated through the comprehensiveness of the process. This became evident through the amount of research completed by the educational leaders into school safety and security planning, along with subsequent dialogue with safety experts. This combination was necessary in order to find the appropriate rules and structural settings that helped the leader to become aware of his or her patterns of risk amplification and attenuation. This self-awareness was a necessary step towards his or her mandate of drafting more comprehensive recommendations that were in line with current safety and security measures. The ideal process was a systemic

approach that utilizes inter-organizational collaboration by which the participants were empowered to understand each other's viewpoint, reflected the potential consequences of different options for action, and focused on a course of action that was desirable and acceptable for all those who must live with the consequences.

The research revealed that 35% of the leaders did not have a heightened awareness of risks, had not researched school safety and security for at least five years, and had not created a systemic approach that utilizes inter-organizational collaboration. These leaders had a minimal school safety and security process. Sixty-five % of the leaders who had a heightened awareness of risks, had researched school safety and security for at least five years, and had created a learning organization that utilizes inter-organizational collaboration, created either an evolving school safety and security planning process, or an exemplary school safety and security planning process. The following perspectives demonstrate a minimal process.

"I just hope it does not happen to us. The media is responsible in some cases, they validate the perpetrators behavior" (PR10).

"I have been to two training on school safety, but I'm new here and we have not addressed the safety issues yet" (PR12).

"I depend on our school nurse to train people, and to stay current on safety issues. I think she can handle most situations" (PR13).

"Yes and no to our existing plan, we are working on one right now, but I have not been to any workshops, and no one has come forward who is interested in school safety" (PR14).

"We have been very fortunate so far, and we monitor all our students. I don't feel we are at any higher risks than any other school" (PR32).

"I just call the police if there is a problem and they respond when they can" (PR19).

An evolving process and an exemplary process are shown through these perspectives.

"Often times the process began in reaction to an incident at a particular school within the district or at a school near one of our schools. The initial incident might have been a suicide, death of a student or employee at the school, or a response to a critical incident within the larger community. From this I realized we needed a more extensive plan that involved everyone in the community" (NPU11).

"My own perception of safety is the key to a stable, safe learning environment" (PR38).

"I have to create a culture of trust and concern, but not without safety" (NPU17).

"I've been in education for over sixteen years and have heard of and seen incidents that have changed my perception of risk to the school environment. I know that I cannot just ignore what is going on in the larger community and hope it does not happen at my school" (NPR1).

"Even though I am new to this school, I am not new to the school safety and security planning process. After the risk assessment was completed, I knew I had my work cut out for me, but I am willing to reallocate the money needed to make the changes" (NPU12).

"It is my responsibility to create the best safety plan possible. Our parents deserve to send their children to a school that has the safest and most secure learning environment possible" (NPU16).

"I have had a gradual shift of attitude towards safety, Even though I did not want to admit it, I know that my time and efforts are best utilized towards safety issues at this time" (PR30).

"After I did research and attended a training session, I changed me whole outlook on safety in schools. I recognized the importance of making safety a priority, and that I was responsible for building the process into the system" (NPU15).

"I think our approach is never stagnant, that we are very safety focused, and that it is up to me to continue the work that has been done over the last ten to twelve years" (PU1).

"It is important that the students know there are measures taken by the school to keep them safe. That is the reason I must be proactive concerning safety" (PR25).

Research Question 5: What are the dimensions distinguishing rural and urban public school districts' and non public schools' safety and security planning process?

Each school's or school district's safety and security plan and each educational leader's perception of risk told a singular story. Yet, when the data were combined and then separated by rural and urban geographic location similarities and differences immerged. Table 3, on page 93 displays the breakdown of public rural, public urban, and non public rural and non public urban. There were no urban public school districts with a minimal process. However, there were 40% rural public districts and 37.5% urban non

public schools with a minimal focus. Although these were similar percentages, the actual cause for this similarity is not known through this study, probable reasons could be due to religious affiliations of non public schools, the proportion of individuals who bear arms in a rural setting, the heightened probability of crime in an urban setting, and the low number of non public sites that were available for this study.

There were 67% urban public districts with an exemplary process, while only 20% of the rural public districts had an exemplary process. This information is consistent with past studies that have been conducted that stress that monetary and physical needs of rural schools may cause the process to be less comprehensive. However, there were 33% urban public districts, 40% rural public districts, and 50% urban non public schools with an evolving process. These percentages indicate that there are many educational leaders, both rural and urban, who are striving to create a more comprehensive process. Even though 100% of the rural non public schools had an evolving process, this is not conclusive evidence because there was only one (1) school in this category.

The perception of risk survey data found in Table 4 and Table 5 indicated that there were similarities as to what risks were perceived as being an extreme concern. Both rural districts and schools and urban districts and schools perceived alcohol/drug use/trafficking, fear/bullying, and physical attack/fight as the risks where serious action should be taken. Similar findings were true for pandemic and terrorism/bioterrorism being the risks that did not cause a concern. However, those districts and schools that had an exemplary process had a plan for these risks.

Sixty.6% of rural districts and schools indicated that suicide was a risk that needed special action, while 45.4% of the urban districts and schools rated it as needing

special action. Those districts and schools that had experienced the suicide of a student or an adult indicated that they were now better prepared if one happened again. Similar percentages were true for bomb threat, natural disaster, and rape/sexual battery. Natural disasters, such as tornadoes, were not specifically included in this study, because all districts and schools have had a plan of action in place for over ten years. However, some districts and schools were rethinking their action plans based on more recently researched strategies (environmental scanning).

Future research would be necessary to better understand the dimensions distinguishing rural and urban public school districts' and non public schools' safety and security planning process. This research could be focused on specific incidents that took place at or near the district or school that caused the educational leader to enhance the school safety and security planning process.

The dimension of a rural geographic location as a protection from risks was given by all of the educational leaders (40%) who had a minimal process. However, 60% of the educational leaders in rural public school districts (displayed in an evolving process and an exemplary process) indicated that their rural location was a threat to the protection of the learning environment. From this study, it appears that location could be a determining factor for the enhancement of the process. Although, there were other influential factors that more strongly affected the safety and security planning process other than the school's or school district's geographic location. These factors include the educational leaders' perceptions of risks, and his or her desire to enhance the overall process. Educational leaders provided these perspectives on the dimension of geographic location:

"We are isolated out in the country, and we are short on money" (PR19).

"Our rural location isolates us from many risks, and we know all of our students" (PR35).

"Our rural location makes us more susceptible to risks, so we have to plan differently" (PR8).

"When issues come up, we meet unofficially to discuss the matter and then make a plan for what we need to do. Our rural location often times leaves us on our own, but that's OK with me" (PR3).

"I came from a larger school district and even though I am now in a rural location, I know there are risks that need to be planned for" (PR38).

"We always felt safe in this rural community, but our location near the interstate is a constant concern that we have always dealt with in our safety and security plan" (PR1).

"Even though we are in a rural location, we still plan for risks to our learning environment. We recently had a mass inoculation on our campus, and we learned a lot about a possible pandemic flu epidemic and how to plan for one" (PR36). "We had a hard time getting the parents from a rural community to adjust their thinking towards safety. But after we met and dialogued about why they had to sign in and why they could not just take their child from the playground; they realized how important it is to focus on safety" (PR11).

"Because we are so far out in the country, we needed a system that would help ensure our safety. We utilize the Incident Command System" (PR33).

Summary

From each school's or school district's safety and security plan, and each educational leader's perception of risk, unique patterns did emerge that indicated that the school safety and security planning process is much more in-depth and thorough when the educational leader has a systemic approach to safety. When the leader utilized environmental scanning, which included research and professional development, the process was much more complex. If the leader had established a large network of stakeholders, both inside the organization and outside of the organization, was willing to utilize their expert advice, had safety as a top priority, and took a proactive approach to safety the process was much more complex. Thus, a course of action that was desirable and acceptable for all those who must live with the consequences was revealed in an exemplary school safety and security planning process.

CHAPTER V

Discussion

This chapter provided a summary of the study, conclusions, significance of the study, implications of the study, limitations of the study, future research, and summary.

Summary of the Study

School leaders must be able to appropriately plan for and manage risks to the learning environment. With the growing demand for educational leaders to take a lead role in the school safety and security planning process, it is essential for schools to respond to this demand by having a systemic approach to safety, utilize environmental scanning and boundary spanning, and recognize the importance of the leaders' perception of risk. In order for the school safety and security planning process to develop into a tool to prevent, solve, or mitigate the consequences of risk issues, research efforts must be increased. In response to this, a multiple case study of sixty-two educational sites was conducted revealing the school safety and security planning process in forty-five public school districts (six being urban and thirty-nine being rural) and seventeen non public schools (sixteen being urban and one being rural).

A public school district was defined as a school that provided educational services to students, had an assigned administrator, received public funds as its primary support, and was operated by an education agency. A non public school was defined as a non-profit PreK-12 school that operates non publicly and is governed by a board of directors or trustees (approximately 1500 in the USA, many with religious affiliations).

The review of the literature examined the theories of the learning organization (systemic approach), inter-organizational collaboration (environmental scanning and

boundary spanning), the perception of risk, and rural and urban dimensions and the school safety and security planning process. A prelude to the important theories was an overview of the need for the school safety and security planning process that also included a history of school violence that has taken place from 1999 to the present. State and federal laws and guidelines for the school safety and security planning process were given, along with expert opinions from safety experts who have devised methods to include in the school safety and security planning process.

Through detailed case study descriptions for each site, the researcher dealt with the volume of data associated with this multiple case study, and allowed for within-case analysis. While searching for cross-case patterns, pairs of cases were selected and then similarities and differences between pairs were listed. Data was also divided by data sources, which disclosed the unique insights possible from different types of data collection. Categories were also selected, which formulated within-group similarities coupled with inter-group differences. Through this process, the categories of minimal process, evolving process, and exemplary process were established for the existing school safety and security plans.

Conclusions

The study of the dimensions of rural and urban location and how this dimension affected the school safety and security planning process is at the beginning stages. For this study, the school safety and security planning process presented similarities in the dimensions of rural or urban. It also indicated that 47% more urban public school districts had an exemplary process compared to rural public school districts. However, it appeared that there were other more influential factors that affected the safety and

security planning process other than if the site was located in a rural area or an urban area. Future studies are needed to determine the causes of the similarities and differences of the planning process. This is further discussed later in this chapter.

It was discovered that a systemic approach, environmental scanning and boundary spanning, and the leaders' perception of risk impacted the school safety and security planning process. The three categories, a minimal process, an evolving process, and an exemplary process described the existing school safety and security planning process. A minimal process displayed a leader who had a limited perception of risk, one who limited exploration to inside of the organization, one who had minimal contact with community stakeholders, and one who had not developed safety as a priority. An evolving process acknowledged a leader who had a malleable perception of risk, was willing to explore outside the limits of the organization, one who was forming a network of stakeholder to assist with enhancements to the existing process, and was developing safety as a priority. An exemplary process affirmed a leader who had a well developed perception of risk, one who continuously explored outside the limits of the organization, one who had formed strong inter-organizational collaborations, and had established safety as a priority.

Sergiovanni (2006) stated that an educational leader's success will depend on his or her ability to harness the capacity of stakeholders, to enhance his or her understanding of sense and meaning, and to build a community of responsibility. Trumbo & McComas (2003) stressed that leaders that have greater affective responses and feel greater social pressures to learn more about a risk perceived a greater need for information, and therefore established better inter-organizational collaboration. These ideals were confirmed by educational leaders who stressed that

"Awareness and education are fundamental to students enjoying a safe, secure educational environment" (NPU8).

"Safety needs to be of utmost concern and needs to be assessed regularly, and that based on the latest information, adjustments will be made to improve the safety of all those in our school" (NPU15).

Significance of the Study

This study was based on the understanding that educational leaders are not safety experts and that the school safety and security planning process in public school districts and non public schools has evolved over time. The significance of this study lies in the multiple case qualitative analyses of sixty-two existing school safety and security planning processes, and the analysis of sixty-two educational leaders' perception of risk. This provided a snapshot of how a variety of public school districts and non public schools have established and hope to maintain a stable, safe learning environment. This study revealed elements that contributed to the comprehensiveness of the school safety and security planning process.

The significance of this study was that the findings confirmed similar conclusions from past and present research on the theories of the systemic approach dynamic of learning organization, inter-organizational collaboration, and risk perception. This agreement was indicated by the comprehensiveness of the school safety and security planning process. The range indicated that the usage or non usage of a systemic approach and inter-organizational collaboration confirmed that the process can be enhanced by these strategies. The depth of the process also confirmed that an educational leader's

whose perception of risk was well developed, and influenced by experts' vital information, created a more all-inclusive school safety and security planning process.

Another significance of this study is that educational leaders can utilize the findings as a baseline to determine if their current school safety and security planning process is progressing towards exemplary. The findings can be used to recognize shortcomings due to established strategies utilized in existing organizational structures.

Implications of the Study

Implications for Theory

Learning organization-systemic approach. Senge's (1990) research drew a blueprint for an organization that valued making the whole of an organization more effective than the sum of its parts. This study delved into the sum of its parts – systems thinking. The findings from this study contributed to the theory of learning organization by confirming that educational leaders who share responsibility and provide the essential links to building a unified system establish a systemic approach that enhances the school safety and security planning process. This study contributed to the understanding that educational organizations are complex and dynamic and are linked by a common theme – as members learn collectively, they (as an organization) reacted more strategically to external challenges (Yeo, 2006). It further confirmed that when a solution cannot be found by an acceptable means within the limitations of the organization, the development of inter-organizational collaborations resulted in solutions to prepare schools to deal with the dynamic changes of the internal and external environments.

The theory of learning organization revealed that individuals learn by creating meaning from information, and by integrating this meaning into a knowledge

consciousness which influences the way in which an organization responded to its environment (Argyris, 1999; Senge, *et al.*, 1999). A systemic approach, or systems thinking, emphasized the importance of seeing the big picture associated with the overall organizational goals. A public school district and a non public school that had a systemic approach to the school safety and security planning process encompassed a large body of methods, tools and principles, which examined the interrelatedness of forces, and visualized them as part of a common process. This systemic approach required effective collaboration both internally and externally and a leader who saw the interconnections in complex systems. Educational leaders who had established a systemic approach stated that

"Risk assessment and intervention have surfaced as a significant time, energy, and resource concern. However, when the process is built into the system, it becomes second nature" (PU1).

"I feel like it is a continuous improvement process for us, and that we have integrated safety into the system" (PR33).

"It took over two years for everyone to recognize the importance of an integrated plan. Not everyone was on board at first, but with repeated drills and with the continuation of incidents around the USA, we knew we needed to keep our focus on safety" (NPU15).

Inter-organizational collaboration. Studies of inter-organizational collaboration revealed that the collective process gathers professionals from organizations that differentiate responsibilities and their orientation toward the problem (Gray, 1989). This approach was beneficial in increasing the comprehensiveness of the school safety and

security planning process. A public school district and a non public school that utilized inter-organizational collaboration went beyond their own limited vision of what was possible.

Environmental scanning activity was inherent in the identification of and formation of strategic issues and the analysis of alternative courses of action (Aguilar, 1967; Choo & Auster, 1993). This study indicated that environmental scanning provided comprehensive information on the current external environment, and that the process resulted in preliminary information needed to select priority issues for which specific plan were developed. It further confirmed that environmental scanning improved organizational performance (Miller & Friesne, 1977; Newgren *et al.*, 1984; Murphy, 1987; Choo, 2001). This study also recognized environmental scanning as a possible advancement of interplay between conditions, the responses of the educational leader, and the consequences that resulted in direct action.

Environmental scanning was considered the exploration phase of identifying potential risks and potential strategies. Dutton & Jackson (1987) and Galbraith (1973) determined that scanning activity was inherent in the identification of and formation of strategic issues and the analysis of alternative courses of action. Educational leaders, who searched for important cues about how the world was changing, created a school safety and security framework that lead the institution towards a strategic assessment of future events (Moen, 2003). Participants for the study stated

"I try to attend as many conferences as I can and I expect others to do the same. I also read as much as possible about what strategies other schools are using" (PU5).

"I spend a lot of time with other superintendents, emergency first responders, community leaders, and other safety experts just so I can stay informed about what has changed" (PR23).

"I have always taken safety seriously, and stay on top of the current studies, and try to implement new ideas" (NPU8).

"I encourage involvement from anyone who is interested in safety. I do not limit committees to only administrators" (PR11).

Boundary spanning was the coordination of experiences, values, context information, and expert insight, and the actions of two or more independent organizations. Implications from this study contributed to how boundary spanning lead to the reconfiguration of core practices and the emergence of a community of practice (Lam, 2001). This study confirmed that the creation of shared knowledge was feasible when organizations shared and improvised local practices, through membership in the same workgroup. It also demonstrated that boundary spanning was a deliberate strategy by some educational leaders to communicate with organizations outside of the school's internal network, and that it was the dominate means by which critical information was gathered and utilized in the school safety and security planning process. This study further confirmed that successful inter-organizational collaborative structures enhanced the school safety and security planning process.

When educational leaders crossed boundaries to bring together the resources needed for an exemplary school safety and security planning process, lasting change occurred in which the entire school community benefited. Districts and schools that had an evolving or an exemplary school safety and security planning process were forming or

had formed inter-organizational collaborations that utilized environmental scanning and boundary spanning. Leaders from exemplary sites described their process

"I went to a great deal of training, met with counselors from Columbine, completed an enormous amount of research, and then I was ready to continue the process that was begun in the mid 90s. Developing a network outside of the district and with community first responders was the most beneficial aspect of the process" (PR21)

"This school district is a major part of the community. I have developed relationships with all of the emergency first responders, and they use our campus for their training facility. We meet on a regular basis and discuss safety issues. They come to the school when we have practice drills, and they offer excellent advice on changes we need to make. One important aspect for us is that they go to conferences and bring back information the same as we do. Building this network has really benefited our district" (PR1).

"We needed to connect with the local organizations, because they have a stake in the community as well" (PU4).

Risk perception. The perception of risk was considered important because it had the potential to influence educational leaders' intent to seek out, assess, and manage risk situations. This study indicated that an educational leader's perception of risk directly influenced the school safety and security planning process. Ferraro, Livingston, Quick, Stogsdill, and Toms (2004) indicated that the largest contributing factor for a school to fall into the failing category was the resolve (perception) of each school system's administrator to take preparedness seriously. This study further confirmed that

educational leaders' whose perception of risk was malleable and well developed engaged in inter-organizational collaboration, which enhanced the school safety and security planning process. Slovic's research (1987) found that there was a difference in risk perception and that an expert's judgment of a risk was strongly related to objective indicators. This study indicated that educational leaders who sought experts' perceptions of risk through inter-organizational collaboration were influenced by the knowledge. Through this influence, the study indicated that these educational leaders exemplified the school safety and security planning process.

Risk perception theories continue to evolve over time. Recent findings recognized risk perception's dependence on intuitive and experiential thinking, and indicated that it was guided by emotional and affective processes (Slovic, 2000). The perception of risk was considered important because it had the potential to influence a person's intent to seek out, assess, and manage risk situations. Educational leaders who accurately perceived a risk sought protective actions. The psychological investigation of the perception of risk placed the educational leader as the focal point, forcing his or her analysis to concentrate on the abstraction of risk and the knowledge that was available concerning the risk. Therefore, educational leaders who perceived a risk did seek out protective actions. This study revealed that, educational leaders who had an evolving process or an exemplary process displayed a proactive approach to the school safety and security planning process. Leaders described their proactive approach as being one where many situations were handled before they become a major risk to the learning environment, because they had a plan of action. These leaders offered these comments

"We must be prepared for anything that could happen, but it takes vigilance to s stay on top of things. Our proactive approach certainly helps us do that" (NPU6). "Addressing a risk as a risk is a major factor that determines what can and what will be done" (PR2).

"I feel a personal responsible for safety in all our school, so I have to recognize the risks and have a proactive approach to planning for the inevitable" (PR8). "Even though we thought we had a good plan in place, we had an incident just last week that proved that no matter how thorough you are there is always room for improvement. That incident opened our eyes as to how we must keep safety as a priority" (PR28).

Rural vs. urban. For this study the classification of rural or urban was determined by the educational leader both during the interview and in the demographic information at the beginning of the perception of risk survey. Although there were guidelines that indicated that a rural school was often located in smaller communities of fewer than 2,500, often times the consolidation of schools created a larger school population. In this case, the students were actually from rural areas. In 2002-2003, 27% (12.5 million) of public school students attended school in communities of fewer than 25,000. In Oklahoma, 31.72% of public school students were enrolled in rural schools, and 50.81% of public schools were in rural areas (Johnson, 2005).

Although research confirmed that rural schools face a unique set of challenges, largely due to geographic location, this study indicated that there are other more influential factors that contributed to the school safety and security planning process.

Also, it was indicated in this study that rural schools, whose educational leaders had a

heightened awareness of risk, formed inter-organizational collaborations, and developed a more comprehensive school safety and security planning process.

Implications for Practice

This study is relevant to educational leaders in pubic school districts as well as non public schools. It is also relevant for stakeholders within the community that have a specific interest in the school safety and security planning process. As the threat of natural disaster, terrorism, acts of violence, pandemics, and other risk situations have become more prevalent, the solutions for these problems are beyond the capacity of single organizations. School districts and schools must improve and sustain efforts to revise school safety and security plans regularly, ensuring that all stakeholders are included in the process. Research based, practical crisis strategies are critical to effective crisis preparedness. Strategies for an exemplary school safety and security planning process include the establishment of a system approach, and utilization of environmental scanning and boundary spanning, and a well developed perception of risk. Stakeholders provide input and participation in meaningful practice drills on a variety of crisis situations to ensure maximum preparedness. Educational leaders need to examine practices relative to the strategies in place for crisis preparedness, and base their decisions on input from a variety of sources and stakeholders.

This study provided strategies that could help educational leaders overcome the barriers against time and funding that are mentioned by some who are struggling to utilize a systemic approach to safety, and inter-organizational collaboration. Although a systemic approach to safety was supported by the superintendent or the head of school, the processes often began with a teacher, coach, principal, parent, or board member.

When the educational leader was willing to engage in the dialogue with others, he or she began the systemic process. Those educational leaders, who encouraged others within the school community to come forth with viable ideas, strengthened the process and discovered a plethora of resources. The initial meeting with stakeholders in the community either began with the educational leader requesting a meeting, or a stakeholder coming to the educational leader with a specific request. From then on, it was up to the educational leader to continue and enhance the process. Having an open minded approach to safety was a key factor to the continuation of the process. These continuous meeting do not require any funding. They were beneficial in that they provide a continuous flow of information from experts outside of the organization.

From these meetings came a desire to become better educated about school safety. The educational leader followed through by researching possible strategies and reasons for focusing on school safety. During this process, he or she also dialoged with others inside and outside of the organization to further develop ideas. A leader, who continued to research school safety, even years after an incident had happened either at his or her school, or across the nation, was better able to offer input and guidance during the planning process. Eventually, the process became a systemic approach and continued to strengthen, regardless of the person in the educational leadership role.

Educational leaders who had an exemplary approach to the school safety and security planning process developed a wide network of stakeholders including local fire departments, police departments, sheriff departments, highway patrol, first responder emergency organizations, health facilities, poison control centers, toxic chemical and oil spills centers, mental health providers, crisis counseling teams, clergy, Department of

Environmental Quality, American Red Cross, Department of Home Land Security,
Federal Bureau of Investigation, civil defense departments, emergency management
agencies, city maintenance departments, utility companies, phone services, radio stations,
ham radio specialists, television stations, technology centers, food provider services,
transportation provider services, parents, school board members, and other school
districts and schools. Through monthly meetings, it became apparent that it was
imperative that all adopt the same emergency strategies. Eventually the meetings were
held on a semi-annual basis, unless an incident needed immediate attention.

Also, from these meetings, came the conclusion that full scale training and practice drills were crucial to the implementation of the school safety and security plan. Members of the broader network offered training sessions at no charge, feedback after practice drills, and utilized the educational facility for training purposes for that specific organization. Continuous contact with members of the network also enhanced the research process, and encouraged others within the educational organization to become more involved in the safety process. The longer the public school district or non public school had been involved in the process, the more likely it was that a specific person had been appointed or hired that had a direct responsibility for the school safety and security planning process.

A specific focus on the human factor within the school setting was also addressed within an exemplary process. Leaders displayed a refined understanding of the importance of a cultural shift in the system when considering young people. This approach involved creating a safe environment for all students, which included a needed connection with troubled students, drug and alcohol education programs, character

education programs, bullying and harassment programs, contractual agreement with students and parents, and further training for administrators, teachers, and staff to recognize specific signs in students who are in difficulty. Through this focus, educational leaders developed a proactive approach to understanding young people by having a broader perspective to the safety and security planning process.

Another factor that was addressed within an exemplary process was attention to changes in the culture of a community. These changes often related to economics, size of the community, community expectations, and special needs of students and adults.

Leaders who recognized and addressed the difficulties surrounding custody battles with divorced parents, non-custodial parents, decrease of income, and adult educational expectations vs. school safety and security expectations were better able to gather the needed support for the school safety and security planning process.

Outside funding for specific safety and security needs was also developed through an exemplary process. Leaders applied for and received grants from COPS, Department of Justice, Department of Education, Department of Homeland Security, and Tribal Nations. Shared costs were also beneficial to the planning process and included training classes offered at local technology centers, shared salaries of school safety officers with local police and fire departments, sharing of trainers for professional days at closely located schools, and no cost training offered by parents, board members, and others within the network.

Limitations of the Study

Although the generalizability of this study may not be applicable to all public school districts' and non public schools' safety and security planning processes across the

United States, there is a nation wide concern for the safety of children and adults in the school setting. It has been reported that educational leaders are challenged by their role as risk analysts and risk manager. Therefore these findings may be significant as a starting point for educational leaders as they research risk analysis and risk management. This study is only a preliminary step in the investigation of the school safety and security planning process. The study of school safety and security planning is relatively current and although more data is generated daily, the topic is broad. In critiquing this study, there are influences upon the findings that need to be acknowledged.

The sampling within the study was a limitation. This study was confined by the limited area utilized for the random selection of cases. The four states area of Texas, Oklahoma, Arkansas, and Kansas did not offer a broad representation of all areas of the United States. Economic factors relative to state and federal funding for education in this area may have been a limitation. The limited selection of rural and urban schools, which did not include suburban and inner-city schools, is also a limitation.

Also, within this area, major events had taken place that may have had influential power over the existing planning process. However, these major events did not cause all districts and schools to establish an exemplary process. Therefore, as indicated in the findings, there were other influences that determined the process. Although, this study does not allow for generalization across all non public schools and public school districts, findings from case studies are generalizable to theory (Yin, 1994). Future studies that included a random selection from several different regions in the United States would add validity to this study.

This study was limited to the possible personal and professional biases of the participants. Educational leaders in specific areas may have felt more protected because they possessed their own guns. They could also have been more reactive to concerns of violence for the same reason. Educational leaders, who were raised in a rural area and had remained in the same area, may have had a false since of safety, even when they had experienced violence first hand. Other educational leaders, who had experienced violence first hand, had a more developed perception of risk, and took a proactive approach to the planning process.

All respondents for this study indicated that incidents that had taken place over the last six to eight years had an impact on their perception of risks to the learning environment. However, this study focused on the continuous progression of changes that enhanced the process. Even though this study took place following recent violent incidents that took place in August, September, and early October, the study of the school safety and security planning process was conducted to reveal the beginning of the process and its progression over at least the last ten years. These incidents influenced responses by educational leaders in that their awareness of school safety was at a heightened level, and many were in the revision stages of the current school safety and security plan.

An influence that could have a bearing on the outcome of the study was the need for the educational leader to project a positive image. However, educational leaders were very forthcoming with their interview answers whether to their organization's advantage or not. The document analysis and survey responses validated the educational leaders' answers.

The data collection instruments were designed to elicit responses from educational leaders about the existing school safety and security planning process, and his or her perception of risk. The interview protocol had not been used in other studies and this is a limitation. In addition, the perception of risk survey was initially used to survey only experts and laypersons. For this study, the survey was changed and no experts where surveyed. For future research, replication of this study would help validate the research instruments. Finally, there was subject bias in the research for educational leaders, as responses were directly influenced by their own academic programs and experiences.

Also, inherent in the research was the presence of researcher bias. Miles and Huberman (1994) found that numerous studies showed that researchers tend to "overweight facts they believe in or depend on, to ignore or forget data not going in the direction of their reasoning, and see confirming instances for more easily than disconfirming instances" (p. 253). Therefore, researcher bias was present. When conducting future research, the utilization of a team of researcher would help minimize researcher bias.

Future Research

Additional research into how specific crisis preparedness strategies impact the school safety and security plan during a crisis incident is a needed area of research. This case study would involve gathering information from schools that have experienced a crisis, researching how the crisis was managed, and what was the outcome. Implications for this study would benefit educational leaders as well as stakeholders by offering a more refined process on what were successful management strategies. This study would

also offer revisions to existing plans, such as those addressed after the recent tornado in Enterprise, AL, or programs presented by individuals who specialize in critical situation training for staff and students at schools. The Incident Command System is a program that was implemented within a few districts. A more in depth study done at these locations could be bring forth needed strategies.

Another study is needed to reveal teachers' and support staff's perceptions of risk and how they affect the school safety and security planning process. Teachers' and support staff's perceptions of risk to a stable, safe learning environment is imperative to the follow through of the management plan. This case study could involve interviewing teachers and support staff at the identical locations from the present study. The research would bring forth implications that would be beneficial to educational leaders as to how to further educate and train teachers and support staff, how to involve teachers and support staff in the school safety and security planning process, and how to better understand the opposing emphasis between academics and safety.

Another case study using existing school safety and security plans at each site within a school district is needed to reveal if and how strategies are currently being implemented and practiced. Although it may appear that a school district has an exemplary school safety and security planning process in place, it is also necessary to validate that plan. Through this study, each site within a district could be researched to determine if the plan is being implemented as stated. Implications for this study would be useful to superintendents, principals, teachers, parents, students, and stakeholders.

Yet another study needed is one that focuses on factors that impede the establishment of an exemplary school safety and security planning process. Time,

money, and an academic focus are areas that have been mentioned, which impede the process. By interviewing educational leaders, teachers, support staff, parents, students, and stakeholders in the community, information could be gathered that highlights unexpected factors that impede the process, such as perceptions and expectation.

Implications from this study could be used by all those involved in the safety and security process. A team of researchers would be needed to complete all of the suggested studies.

Summary

This chapter provided a summary of the findings, conclusions, significance of the study, implications of the study, and future research. Although, there is no way of knowing that any school is truly safe, even in those that demonstrated an exemplary school safety and security planning process, the threat of risk continues to exist. As stated above, educational leaders are not safety experts. However, there is a growing demand for educational leaders to take a lead role in the school safety and security planning process. Therefore, it is essential for schools to respond to this demand by having a systemic approach to safety, utilize environmental scanning and boundary spanning, and recognize the importance of the leaders' perception of risk. With this study providing an in-depth look at the school safety and security planning process it confirms that the responsibility of educational leaders to create and maintain a stable, safe learning environment continues to be a primary concern for school communities across the United States. As a result, it is important that research is continued in this area so that students and adults will continue to benefit from improved safety strategies that impact the creation and maintenance of a safe, secure learning environment.

REFERENCES

- Aguilar, F. J. (1967). Scanning the business environment. New York: Macmillan.
- Alderfer, C.P. (1980). Consulting to underbounded systems, In C.P. Alderfer & C.L. Copper (Eds.), *Advances in experiential social processes.* (2nd ed.). Vol.2, pp.267-295. New York: John Wiley & Sons.
- Alexander, E. R. (1995). *How organizations act together: Interorganizational coordination in theory and practice.* Milwaukee: Gordon and Breach Publishers.
- Althaus, C.E. (2005). A disciplinary perspective on the epistemological status of risk. *Risk Analysis*, 25,(3), 567-588.
- American Red Cross (2002). Homeland security advisory system recommendations. Retrieved November 15, 2005 from http://americanredcross.org/schools
- American Psychiatric Association. (2000) *Diagonostic and statistical manual of mental disorders*. (4th ed.). Washington, DC: Author.
- Argyris, C. (1997). Learning and teaching: A theory of action perspective. *Journal of Management Education*, 21(1), 9-26.
- Argyris, C. & Schon, D. (1978). *Organizational learning: A theory of action perspective*. Reading, MA: Addison-Wesley.
- Babbie, E. (1999). *The Basics of Social Research*. New York: Wadsworth Publishing Company.
- Baggerly, J.N., Rank, M.G. (2005). Bioterrorism preparedness: What school counselors need to know. *Professional School Counseling*, 8,(5), 458-64.
- Bailey, D. & Koney, K.M. (2000). *Strategic alliances among health and human services organizations*. Thousand Oaks, CA: Sage Publications, Inc.
- Barton, L. (2000). *Crisis in organizations*. (2nd ed.). Cincinnati: South-Western Publishing Co.
- Bassett, P.F. (1999). School safety in independent school. *Independent Schools Association of the Central School (ISACS), monograph.* Retrieved June 29, 2005 from http://www.isacs.org
- Bennis, W.G. (1969). Organizational development: Its nature, origins and prospects. Reading, MA: Addison-Wesley.

- Black, S. (2004). Revising school attack protections since 9/11. *American School Board Journal*, 191, 36-38.
- Blau, P.M. & Scott, W.R. (1962). *Formal organizations*. San Francisco: Chandler Publishing Company.
- Bernstein, P.L. (2000). Facing the consequences. Business Economics, 35,(8).
- Bouleris, S, Collett, D.E, Mauntler, M., & Ray, S. (2003). McCormick's mayhem: "The time to learn to dance is not five minutes before the party." School crisis management case study. *U.S. Department of Education*, *1-12*.
- Bowman, P.A., (1991). An introduction to the Texas risk communication process. In B.J. Garrick & W.C. Gekler (Eds.). *The analysis, communication, and perception of risk.* New York, NY: Plenum Press.
- Boynton, A.C, Gales, L.M., & Blackburn, R.S. (1993). Managerial search activity: The impact of perceived role uncertainty and role threat. *Journal of Management*, 19, 725-747.
- Bravata, D.M., Sundaram, V., McDonald, K.M., Smith, W.M., Szeto, H., Schlenitz, M.D., & Owens, D.K. (2005). Evaluating detection and diagnostic decision support systems for bioterrorism response. *Emerging Infectious Disease*, 10, 1.
- Brock, S.E., & Cowan, K. (2004). Preparing to help students after a crisis principal leadership probably not caused by NCLB, but serious stuff all the same. *The education digest*, 69(6), 34-40.
- Brown, J.S. & Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science*, *2*, *40-57*.
- Buckler, B. (1996). A learning process model to achieve continuous improvement and innovation. *The Learning Organization*, 3(3), 31-39.
- Calabrese, R. (2000). *Leadership for safe schools: A community-based approach*. Lanham, MA: Scarecrow Press.
- Centers for Disease Control and Prevention (2001). Recognition of illness associated with the intentional release of a biologic agent. MMWR, 50(41): 893-897. Retrieved November 11, 2005, from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5041a2.htm
- Center for the Prevention of School Violence. (2000). *Planning guide: A tool for Community violence prevention efforts.* Boulder, CO: University of Colorado.

- Choo, C.W. (1999). The art of scanning the environment. *Bulletin of the American Society for Information Science and Technology*, 25, 21-24.
- Choo, C.W. (2001). Environmental scanning as information seeking and organizational learning. *Information Research*, 7(1).
- Choo, C.W. & Auster, E. (1993). Environment scanning: Acquisition and use of information by managers. In M.E. Williams (ed.) *Annual review of information science and technology*. Toronto: Learned Information Inc.
- Colgan, C. (2005). Emerging security strategies begin with collaboration and motivation. *American School Board Journal*, 10-12.
- Connecticut Department of Public Health (n.d.). *Bioterrorism preparedness and response fact sheet*. Retrieved November 11, 2005 from http://209.150.7.232/factSheet.shtml
- Cooke, R.M. (1991). Experts in uncertainty: Opinions and subjective probability in science. Oxford, England: Oxford University Press.
- Correia, Z. & Wilson, T.D. (2001). Factors influencing environmental scanning in the organizational context. *Information Research 7(1)*. Retrieved July 10, 2006 from http://InformationR.net/ir/7-1/paper121.html
- Cosh, J., Kim, K., Fullwood, A., Lippek, M., & Middleton, J. (2003). The delivery: A case study in bioterrorism preparedness. *EDRS Price MF01/PC01*.
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative sociology*, 13,1,1990.
- Cox III, E.P. (1999). Source. In M.S. Wogalter, D.M. DeJoy, & K.R. Laughery (Eds.). *Warning and risk communication.* Philadelphia: Taylor & Francis Inc.
- Cox, L.A. (1991). Uncertain temporal logics for risk analysis. In B.J. Garrick & W.C. Gekler (Eds.). *The analysis, communication, and perception of risk.* New York: Plenum Press.
- Daft, R.L., Sormunen, J., & Parks, D. (1988). Chief executive scanning, environmental characteristics, and company performance: An empirical study. *Strategic Management Journal*, *9*, 123-139.
- Dake, K. & Wildavsky, A. (1991). *Individual differences in risk perception and risk taking preferences*. In B.J. Garrick & W.C.Gekler (Eds.). *The analysis, communication, and perception of risk*. New York: Plenum Press.

- Damasio, A.R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: Avon.
- DeBord, K. (2001). Children's needs. Retrieved November 15, 2005 from www.preparerespondrecover.com/childrensneeds
- Della-Giustina, D.E., Kerr, S.E, Georgevich, D.L. (2000). Terrorism and violence in our Schools. *Professional Safety*, *45*,*3*,*16*-21.
- Desaulniers, D.R. (1989). Consumer products hazards: What will we think of next? In *Proceedings of INTERFACE '89, The Sixth Symposium on Human Factors and Industrial Design in Consumer Products.* Santa Monica, CA: Human Factors Society, pp. 115-120.
- DeJoy, D.M. (1999). Attitudes and beliefs. In M.S. Wogalter, D.M. DeJoy, & K.R. Laughery (Eds.). *Warning and risk communication*. Philadelphia: Taylor & Francis Inc.
- DeJoy, D.M. (1999). Motivation. In M.S. Wogalter, D.M. DeJoy, & K.R. Laughery (Eds.). *Warning and risk communication*. Philadelphia: Taylor & Francis Inc.
- DiGiovanni, C. (1999). Domestic terrorism with chemical or biological agents: Psychiatric aspects. *The American Journal of Psychiatry*, 156, 1500-1505.
- Dollinger, M.J. (1984). Environmental boundary spanning and information processing effects on organizational performance. *Academy of Management Journal*, 27(2), 351-368.
- Dorn, M.S. (2002). Terrorism and schools. *School Planning and Management*, 40(11), 19-35.
- Douglas, M. (1992). Risk and blame: Essays in cultural theory. London: Routledge.
- Douglas, M. & Wildavsky, A. (1982). *Risk and culture: An essay on the selection of technological and environmental dangers*. Berkeley, CA: University of California Press.
- Dutton, J.E. & Jackson, S.E. (1987). Categorizing strategic issues: Links to organizational action. *Academy of Management Review, 12, 76-90.*
- Eadie, D.C. (1989). Building the capacity for strategic management. *Handbook of public administration*. Jossey-Bass.
- Earle, T.C. (2004). Thinking aloud about trust: A protocol analysis of trust in risk management. *Risk Analysis*, 24(1), 169-183.

- Eisenhardt, K.M. (1989). Building theories from case study research. *Academy of management review*, 14,4,532-550.
- Eiser, J.R. (1994). *Attitudes, chaos and the connectionist mind*. Oxford, England: Blackwell.
- Etzioni, A. (1964). *Social change: Sources, patterns, and consequences*. New York: Basic Books.
- Federal Emergency Management Agency. (n.d.). Emergency management guide for business and industry. Retrieved November 11, 2005, from http://.fems.gov/library/biz2.shtm
- Fein, R.A., Vossekuil, B., Pollack, W.S., Borum, R., Modzeleski, W., & Reddy, M. (2002). *Threat assessment in school: A guide to managing threatening situations and to creating safe school climates*. Washington DC: United States Secret Service & United States Department of Education.
- Fein, R.A, Vossekuil, B., & Holden, G. (1995). Threat assessment: An approach to prevent targeted violence. *Research in Action, U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, Washington. D.C.*
- Finn, C.B. (1996). Utilizing stakeholder strategies for positive collaborative outcomes. In C. Huxham (Ed.), *Creating Collaborative Advantage*, pp. 152-164, London: Sage Publications.
- Finucane, M.L., Peters, E., & Slovic, P. (2003). Judgment and decision making: The dance of affect and reason. In S.L. Schneider & J. Shanteas (Eds.). *Emerging perspectives on judgment and decision research (pp.327-364)*. New York: Cambridge University Press.
- Fischhoff, B., Slovic, P., Lichtenstein, S., Read, S., & Combs, B. (1978). How safe is safe enough? A psychometric study of attitudes towards technological risks and benefits. *Policy Sciences*, 9, 127-152.
- Fischhoff, B., Lichtenstein, S., Slovic, P., Derby, S.L., & Keeney, R.L. (1981). *Acceptable risk.* New York: Cambridge University Press.
- Fontaine, N.S. (2003). Threats to the quality of school safety data. *Research in Education*, 68 May) 16.
- Freudenburg, W.R. (2003). Institutional failure and the organizational amplification of Risks: The need for a closer look. In N. Pigeon, R.E. Kasperson, and P.Slovic (eds.) *The social amplification of risk*. United Kingdom: Cambridge University Press.

- Fullan, M.E. (1991). *The new meaning of educational change*. New York: Teachers College Press.
- Fulmer, R.M., & Jeys, J.B. (1998). A conversation with Chris Argyris: The father of organizational learning. *Organizational Dynamics, Autumn, 21-32*.
- Galbraith, J.R. (1973). *Designing complex organizations*. Reading, MA: Addison Wesley.
- Garratt, B. (1999). The learning organization 15 years on: Some personal reflection. *The Learning Organization*, 6(5), 202-206.
- Garrett, S. (2005). Safe schools guide: Selected strategies and resources, Oklahoma State Department of Education. *A Safe School Through Prevention*, 1, 1-5
- Garrick, B.J., & Gekler, W.C. (1991). *The analysis, communication, and perception of risk.* New York: Plenum Press.
- Garvin, D. (1993). Building a learning organization. *Harvard Business Review, July August*, 78-91.
- Gasson, S. (2005). The dynamics of sensemaking, knowledge, and expertise in collaborative, boundary-spanning design. *Journal of Computer-Mediated Communication*, 10(4), 1-26.
- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory. Chicago: Aldine.
- Godfrey, S.S., Allender, L., Laughery, K.R., & Smith, V.L. (1983). Warning messages: Will the consumer bother to look? In *Proceedings of human factor society* 27th annual meeting. Santa Monica, CA: Human Factors Society, pp. 950-954.
- Golden, T. & Veiga, J. (2005). Spanning boundaries and borders: Toward understanding the cultural antecedents of team boundary spanning. *Journal of Management Issues*, 17, 22-34.
- Goldring, E.B. (1995). Striking a balance: Boundary spanning and environmental management in school. In S.B Bacharach and B. Mundell (Eds.) *Images of schools: Structures and roles in organizational behavior*. Thousand Oaks, CA: Corwin Press, Inc.
- Goldring, E.B. (1996). Schools as dynamic organizations. *International Journal of Educational Reforsm*, 3(5), 278-285.
- Goldring, E.B. & Rallis, S.F. (1993). *Principals of dynamic schools: Taking charge of change*. Newbury Park, CA: Corwin Press, Inc.

- Gray, B. (1985). Conditions facilitating interorganizational collaboration. *Human Relations*, 39,911-936.
- Gray, B. (1989). Collaborating. San Francisco: Jossey-Bass.
- Griffey, S. (1998). Conceptual frameworks beyond the learning organization. *The Learning Organization*, 5(2), 68-73.
- Griffin, R. J., Dunwoody, S., & Neuwirth, K. (1999). Proposed model of risk information seeking and processing to the development of preventive behaviors. *Environmental Research*, 80, S230-S245.
- Griffin, R. J., Neuwirth, K., Giese, J., & Dunwoody, S. (2002). Linking the heuristic systematic model and depth of processing. *Communication Research*, 29 (6), 705-732.
- Gutteling, J.M. & Wiegman, O. (1996). *Exploring risk communication*. Boston: Kluwer Academic Publishers.
- Hardy, C. & Phillips, N. (1998). Strategies of engagement: Lessons from the critical examination of collaboration and conflict in an interorganizational domain. *Organizational Science*, 9 (2), 217-230.
- Hardy, C., Phillips, N., & Lawrence, T.B. (2003). Resources, knowledge and influence: The organizational effects of interorganizational collaboration. *Journal of Management Studies*, 40 (2), 321-347.
- Hawkins. P. (1991). The spiritual dimension of the learning organization. *Management Education and Development*, 22(3), 172-187.
- Hazy, J.K., Tivnan, B.F., Schwandt, D.R. (2003). Boundary spanning in organizational learning: Preliminary computational explorations. Unpublished manuscript, The George Washington University, jim.hazy@att.net
- Hessel, K., & Holloway, J. (2002). A framework for school leaders: Linking the ISLLC standards to practice. Princeton, NJ: Educational Testing Service.
- Himmelman, A.T. (1996). On the theory and practice of transformational collaboration: From social service to social justice. In C. Huxham (Ed.) *Creating Collaborative Advantage* (pp19-43) London: Sage Publications.
- Hoff, D. (2001). Attacks alter instructional landscape. *Education Week*, 21(4).

- Horlick-Jones, T., Sime, J., & Pidgeon, N. (2003). The social dynamics of environmental risk perception: implications for risk communication research and practice. In N. Pigeon, R.E. Kasperson, and P. Slovic (Eds.) *The social amplification of risk*. United Kingdom: Cambridge University Press.
- Hough, J.R. & White, M.A. (2004). Scanning actions and environmental dynamism. *Management Decision* 42,(5/6), 781-793.
- Huxham, C. (1996). Creating Collaborative Advantage. London: Sage Publications.
- Huxham, C. & Vangen, S. (2000). Ambiguity, complexity, and dynamics in the membership of collaboration. *Human Relations*, 53 (6), 771-806.
- Janis, I.L. (1982). Groupthink: Psychological studies of policy decisions and fiascoes. Boston: Houghton Mifflin.
- Joffe, H. (2003). Risk: From perception to social representation. *British Journal of Social Psychology*, 42, 55-73.
- Johnson, B.B. (1999). Ethical issues in risk communication: Continuing the discussion. *Risk Analysis*, 19(3).
- Johnson, J. (2005). Why rural matters 2005: The facts about rural education in the 50 states. Retrieved April 17, 2007, from www.ruraledu.org
- Journal of School Health. (2004). Schools and terrorism. *Journal of School Health*, 74(2), 39-52.
- Jungerman, H. (1996). Ethical dilemmas in risk communication, in D.M. Messick and A.E. Tenbrunsel (Eds.) *Codes of conduct: Behavioral research into business ethics.* New York: Russell Sage.
- Kahlor, L., Dunwoody, S., Griffin, R.J., Neuwirth, K., & Giese, J. (2003). Studying heuristic-systematic processing of risk communication. *Risk Analysis*, 23, 2, 355-368.
- Kaufman, P. Ruddy, S., Chandler., & Plany, M. (2001). *Indicators of school crime and Safety: 2001*. Washington, DC: U.S. Department of Education and U.S. Department of Justice.
- Karnes, E.W. & Leonard, S.D. (1986). Consumer product warnings: Reception and understanding of warning information by final users. In *Trends in Ergonomics/ Human factors III*, Part B, *Proceedings of the annual international industrial ergonomics and safety conference*, pp. 995-1003.

- Kasperson, J.X., Kasperson, R.E., Pidgeon, N., & Slovic, P. (2003). The social amplification of risk: Assessing fifteen years of research and theory. In N. Pigeon, R.E. Kasperson, and P.Slovic (eds.) *The social amplification of risk*. United Kingdom: Cambridge University Press.
- Kasperson, R.E. (1992). The social amplification of risk: Progress in developing an integrative framework. Westport: Praeger.
- Kasperson, R.E., Renn, O., Slovic, P., Brown, H.S., Emel, J., Goble, R., Kasperson, J.X., & Ratick, S. (1988) The social amplification of risk: A conceptual framework. *Risk Analysis*, 8(2), 177-187.
- Kay, R., & Bawden, R. (1996). Learning to be systemic: Some reflections from a learning organization. *The Learning Organization*, *3*(5), *18-25*.
- Keller, R.T & Holland, W.E. (1975). Boundary-spanning roles in a research and development organization: An empirical investigation. *Academy of Management Journal*, 18(2), 388-393.
- Kiers, H.A.L., & Van Mechelen, I.V. (2001). Three-way component analysis: Principles and illustrative application. *Psychological methods*, 6(1), 84-110.
- Kogut, B., Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, *9*, 285-305.
- Kroonenberg, P.M., & DeLeeuw, J.D. (1980). Principal component analysis of three mode data by means of alternating least squares algorithms. *Psychometric Society*. *45*(1).
- Kraft, M.E. (1991). Risk perception and the politics of citizen participation: The case of radioactive waste management. In B.J. Garrick & W.C. Gekler (Eds.). *The analysis, communication, and perception of risk.* New York: Plenum Press.
- Lam, A. (2001). Tacit knowledge, organizational learning, and societal institutions: An Integrated framework. *Organizational Studies*, 21(3), 487-513.
- Lamb, R. & Davidson, E. (2000). The new computing archipelago: Intranet islands of practice. *IFIP 8.2 Conference Proceedings, June*.
- Larsson, R., Bengtsson, L., Henriksson, K., & Sparks, J. (1998). The interorganizational learning dilemma: Collective knowledge development in strategic alliances. *Organizational Science*, *9*, 285-305.
- Laughery, K.R. (1999). The expert witness. In M.S. Wogalter, D.M. Dejoy, & K.R. Laughery (Eds.). *Warning and risk communication*. Philadelphia: Taylor & Francis Inc.

- Laux, L.F. & Brelsford, J.W. (1989). Locus of control, risk perception, and precautionary behavior. In *Proceedings of INTERFACE '89, The sixth symposium on human factors and industrial design on consumer products.* Santa Monica, CA: Human factors society, pp. 121-124.
- Leiss, W. (2001). *In the chamber of risks: Understanding risk controversies.* New York: McGill-Queens University Press.
- Leiss, W., & Powell, D.A. (2004). *Mad cows and mother's milk: The perils of poor risk communication*. New York: McGill-Queens University Press.
- Litchfield, R.C. (2002). Improving managerial diagnosis of people problems. *Dissertation Abstracts International*, (UMI No. 3049075).
- Linden, R.M. (2002). Working across boundaries: Making collaboration work in government and nonprofit organizations. San Francisco: Jossey-Bass.
- Lipka, S. (2005). After Katrina, colleges nationwide take a fresh look at disaster plans. *The Chronicle of Higher Education*, 52(8), A28.
- Lundgren, R. & McMakin, A. (2004). *Risk communication: A handbook for communicating environmental, safety, and health risks*. Columbus, Ohio: Battelle Press.
- MacCorkle, G.A. (1995). Accounting for the cost of risk. *Risk Management*, 41, 12, 21 24.
- Maddon, M.S. (1999). The law relating to warnings. In M.S. Wogalter, D.M. Dejoy, & K.R. Laughery (Eds.). *Warning and Risk Communication*. Philadelphia: Taylor & Francis Inc.
- Markus, M.L., Majchrzak, A., & Gasser, L. (2002). A design theory for systems that support emergent knowledge processes. *Management Information Systems Quarterly*, 26(3).
- Marquardt, M.J. (1996). Building the learning organization: A systems approach to quantum improvement and global success. New York: McGraw-Hill.
- Marris, C., Langford, I.H., & O'Riordan, T. (1998). A quantitative test of the cultural theory of risk perceptions: Comparison with the psychometric paradigm. *Risk Analysis*, 18(5), 635-647.
- Maslow, A.H. (1999). *Toward a psychology of being*, 3rd Ed. New York: John Wiley & Sons, Inc.

- Maxwell, S.E., & Delaney, H.D. (1990). *Designing experiments and analyzing data*. Pacific Grove, CA: Brooks/Cole Publishing Company.
- McGuire, C.B. (1969). *Rational investment behavior in the face of floods*. Detroit: Management Information Services.
- McGuire, L. (1980). Suicide. Vero Beach, FL: Rourke Corp.
- Merriam, S.B. (1998). Qualitative research and case study applications in education. San Francisco: Jossey-Bass.
- Messick, D.M., & Tenbrunsel, A.E. (Eds.) (1996). *Codes of conduct: Behavioral research into business ethics.* New York: Russell Sage.
- Miles, M., & Huberman, A. (1994). Qualitative data analysis. Thousand Oaks: Sage
- Mileti, D.S., Fitzpatrick, C., & Farhar, B.C. (1992). Fostering public preparations for Natural hazards: Lessons from the parkfield earthquake prediction. *Environment*, 34(3), 16-20.
- Miller, D. & Friesen, P.H. (1977). Strategy-making in context: ten empirical archetypes. *Journal of Management Studies*, 14(3), 253-280.
- Moen, R.S. (2003). Environmental scanning makes planning possible. *Association Management*, 55 (8), 65-66.
- Moilanen, R. (2001). Diagnostic tools for learning organizations. *The Learning Organization*, 8(1), 6-20.
- Moilanen, R. (2005). Diagnosing and measuring learning organizations. *The Learning Organization*, 12(1), 71-89.
- Morgan, G. (1997). *Images of organizations*. Beverly Hill: Sage Publications.
- Morgan, M.G., Fischhoff, B., Bostrom, A., & Atman, C.J. (2002). *Risk communication: A mental models approach.* New York: Cambridge University Press.
- Morrison, J.L. (1992). Environmental scanning. In M.A. Whitely, J.D Porter, and R.H. Fenske (eds.), *A primer for new institutional researchers*. Tallahassee, FL: The Association for Institutional Research.
- Mullen, E.J. (2006). Choosing outcome measures in systematic reviews: Critical challenges. *Research on social work practices*, 16(1), 84-90.

- Murdock, G., Petts, J., & Horlick-Jones, T. (2003) After amplification: Rethinking the role of the media in risk communication. In N. Pigeon, R.E. Kasperson, and P.Slovic (eds.) *The social amplification of risk*. United Kingdom: Cambridge University Press.
- Murphy, M.F. (1987). Environmental scanning: A case study in higher education. Athens, GA: University of Georgia. (Ed.D. thesis).
- Murray, P. (2002). Cycles of organizational learning: A conceptual approach. *Management Decisions*, 40(3), 239-247.
- Nathwani, J.S., Lind, N.C., & Siddall, E. (1991). Risk-benefit balancing in risk management: Measures of benefits and detriments. In B.J. Garrick & W.C. Gekler (Eds.). *The analysis, communication, and perception of risk.* New York: Plenum Press.
- National Association of Independent Schools. (2003). *Crisis guidelines for independent Schools part 1*. Retrieved September, 14, 2005 from http://www.nais.org
- National Association of Independent Schools. (2001). *Crisis management plan for an independent school*. Retrieved September, 14, 2005 from http://www.nais.org
- National Association of School Nurses. (2005). School nurse role in bioterrorism emergency preparedness and responses. Retrieved February 26, 2006 from nasn@nasn.org
- National Advisory Committee on Children and Terrorism. (2003). Recommendations to the Secretary. Retrieved August 24, 2005, from http://www.bt.cdc.gov/children/PDF/working/Recommend.pdf
- National Research Council (NRC). (1989). *Improving risk communication*. Washington D.C.: National Academy Press.
- National Research Council (NRC). (1996). *Understanding risk: Informing decisions in a democratic society*. Washington D.C.: National Academy Press.
- National School Safety and Security Services (n.d.). Heightened school security procedures during terrorist threats. Retrieved November 15, 2005, from http://www.schoolsecurity.org/terrorist_response.html
- Newgren, K.E., Rasher, A.A., & LaRoe, M.E. (1984). An empirical investigation of the relationship between environmental assessment and corporate performance. Proceedings of the 44th annual meeting of the Academy of Management. Washington, DC.

- New York State Office of Mental Health. (2001). Crisis counseling guide: Age-related reactions of children to disaster. Retrieved November 15, 2005, from http://www.omh.state.ny.us/omhweb/crisis/criscoounseling3.html
- No Child Left Behind Act of 2002. (2002). Retrieved February 26, 2006, from http://www.ed.gov/legistration/ESEA02/107-110.pdf
- North, C.S., Nixon, S.J., Shariat, S., Mallonee, S., McMillen, J.C., Spitznagel, E.L., & Smith, E.N. (1999). Psychiatric disorders among survivors of the Oklahoma City bombing. *Journal of the American Medical Association*, 282(8),755-762.
- Office of Homeland Security. (2003). Gov. Ridge announces homeland security advisory system. Retrieved February 26, 2006. from http://www.whitehouse.gov/news/releases/2002
- O'Hair, D. (2005). *The complacency-curiosity-immediacy-critically framework*. Unpublished technical report. Norman, OK: University of Oklahoma
- Ong, C.A. (2003). Response to threat levels. Retrieved February 26, 2006, from Indiana Department of Education Web site: www.doe.state.in.us/isssa/pdf/cliffordong.pdf
- Orr, J. E. (1990). Sharing knowledge, celebrating identity: Community memory in a service culture. In D. Middleton & D. Edwards (Eds.) *Collective Remembering*. Thousand Oaks CA: Sage Publications Ltd. 169-189.
- Owens, B. (1999). Violence among our children. *Vital Speeches of the Day*, 65, 764 767.
- Pedler, M. (1998). Action learning in practice. The Learning Organization, 5(4),
- Pedler, M. & Aspinall, K. (2000). A concise guide to the learning organization. *The Learning Organization*, 7(1),
- Perri, 6. (2005). What's in a frame: Social organization, risk perception and the sociology of knowledge. *Journal of Risk Research*, 8(2) 91-118.
- Phillips, B.T. (2003). A four-level learning organization benchmark implementation model. *The Learning Organization*, 10(2), 98-105.
- Pidgeon, N., Kasperson, R.E., Slovic, P. (2003). *The social amplification of risk*. United Kingdom: Cambridge University Press.
- Porter, M. (1985). Competitive advantage. New York: The Free Press.

- Ptaszynski, J.G. (1989). Ed Quest as an organizational development activity: Evaluating the benefits of environmental scanning. Chapel Hill, NC: The University of North Carolina at Chapel Hill. (Ph.D. dissertation).
- Redlener, I. (2002). September 11th emotional upset lingers. *Bioterrorism Week, October.*
- Renn, O. (2003). Amplification in participation. In N. Pigeon, R.E. Kasperson, and P. Slovic (eds.) *The social amplification of risk*. United Kingdom: Cambridge University Press.
- Rethans, A. J. (1980). Consumer perceptions of hazards. In *PLP-80 proceedings*, 25-29.
- Reynolds, R., & Ablett, A. (1998). Transforming the rhetoric of organizational learning to the reality of the learning organization. *The Learning Organization*, *5*(1), 24-35.
- Rogers, E.M. (1995). Diffusion of innovation. 4th Edison. New York: Free Press.
- Rosa, E.A. (2003) Metatheoretical foundation. In N. Pigeon, R.E. Kasperson, and P. Slovic (eds.) *The social amplification of risk*. United Kingdom: Cambridge University Press.
- Rosenkopf, L., Nerkar, A. (2001). Beyond local search: Boundary-spanning, exploration and impact in the optical disc industry. *Strategic Management Journal*, 22, 287-306.
- Rouse, W.B. & Rouse, S.H. (1984). Human information seeking and design information systems. *Information Processing and Management, July, 55-62*.
- Rousseau. D.M., Sitkin, S.B., Burt, R.S., & Cramerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23, 393-404.
- Rowan, K.E. (1994). The technical and democratic approaches to risk situations: Their appeal, limitations, and rhetorical alternative. *Argumentation 8, 391-409*.
- Sanders, M.S., & McCormick, E.J. (1993). *Human factors in engineering and design*. New York: McGraw-Hill.
- Sawyerr, O.O. (1993). Environmental uncertainty and environmental scanning activities of Nigerian manufacturing executives: A comparative analysis. *Strategic Management Journal*, 14, 287-299.

- Saylor, C.F., Cowart, B.L., Lipovsky, J.A., Jackson, C., & Finch, Jr., A.J. (2003). Media exposure to September 11. *American Behavioral Scientist*, 46(12), 1622-1642.
- Schein, E.H. (1992). *Organizational culture and leadership*. San Francisco: Jossey-Bass.
- Schreck, C.J. & Miller, J.M. (2003). Sources of fear of crime at school: What is the relative contribution of disorder, individual characteristics, and school security. *Journal of School Violence* 2(4) 57-79.
- Senge, P.M. (1990). *The fifth discipline: The art & practice of the learning organization*. New York: Dell Publishing Group, Inc.
- Senge, P.M. (1996). Leading learning organizations. *Training and Development*, 50(12), 36-37.
- Senge, P.M., Kliener, A, Roberts, C., Ross, R.B., & Smith, B.J. (1994). *The fifth discipline fieldbook: Strategies and tools for building a learning organization*. New York: Doubleday.
- Senge, P.M., Kliener, A, Roberts, C., Ross, R.B., Roth, G., & Smith, B.J. (1999). *The dance of change: The challenge of sustaining momentum in learning organizations*. New York: Doubleday.
- Senge, P.M., Cambron-McCabe, N., Lucas, T., Smith, B.J., Dutton, J., & Kleiner, A. (2000). *A fifth discipline fieldbook for educators, parents, and everyone who cares about education.* New York: Doubleday Dell Publishing Group, Inc.
- Sergiovanni, T.J. (2006). *The principalship: A reflective practice perspective*, 5th Ed. Boston: Allyn and Bacon.
- Sergiovanni, T.J., Kelleher, P., McCarthy, M.M., & Wirt, F.M. 2004. *Educational governance and administration*, 5th Ed. Boston: Pearson Education, Inc.
- Siegrist, M., Keller, C., & Kiers, H.A.L. (2005). A new look at the psychometric paradigm of perception of hazards. *Risk Analysis*, 25(1).
- Siegrist, M., Cvetkovich, G., & Roth, C. (2000). Alient value similarity, social trust, and risk/benefit perception. *Risk Analysis*, 20(3).
- Slaughter, R. (1999). A new framework for environmental scanning. Foresight, the journal of futures studies, strategic thinking and policy. 1(5).

- Slovic, P., Finucane, M.L., Peters, E., & MacGregor, D.G. (2004). Risk as analysis and risk as feelings: Some thoughts about affect, risk, and rationality. *Risk Analysis*, 24(2), 311-322.
- Slovic, P. (2000). *The perception of risk*. London: Earthscan Publications.
- Slovic, P. (1999). Trust, emotion, sex, politics, and science: Surveying the risk assessment battlefield. *Risk Analysis*, 19(4).
- Slovic, P. (1993). Perceived risk, trust, and democracy. Risk Analysis, 13(6).
- Slovic, P. (1987). Perception of risk. *Science*, 236, 280-290.
- Slovic, P, Fischoff, B., & Lichtenstein, S. (1980). Facts and fears: Understanding perceived risk. In R.C. Schwing & W.A Albers, Jr. (Eds.). *Societal risk assessment: How safe is safe enough.* New York: Plenum Press.
- Slovic, P., Fischhoff, B., Lichtenstein, S., Read, S., & Combs, B. (1978). How safe is safe enough? A psychometric study of attitudes towards technological risks and benefits. *Policy Sciences*, *9*, *127-152*.
- Small, A. & Irvine, P. (2006). Towards a framework for organizational learning. *The Learning Organization*, 13(3), 276-299.
- Smith, L.I. (2002). A tutorial on principal components analysis. Retrieved April 15, 2006, from http://www.
- Sofranko, A.J, & Khan, A. (1988). It's not that simple: Improving needs assessment. *Journal of Extension. Winter, 14-16.*
- Sokoloff, M. (2000). Safety as a community-wide responsibility. *Media & Methods*, *36,4-7*.
- Sorell, T.L. (1991). Common methodological flaws in risk assessment. In B.J. Garrick & W.C. Gekler (Eds.). *The analysis, communication, and perception of risk*. New York: Plenum Press.
- Staples, D.S., Greenaway, K., & McKeen, J.D. (2000). Research opportunities relevant for managing knowledge-based enterprises. *Queen's Management Research Centre for Knowledge-Based Enterprises*. Retrieved July 10, 2006, from http://www.business.queensu.ca/kbe
- Starr, C. (1969). Social benefit versus technological risk. Science, 165, 1232-1238.
- Steiner, L. (1998). Organizational dilemmas as barriers to learning. *The Learning Organization*. 5(4), 193-201.

- Strauss, A, & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* London: Sage.
- Subramanian, R., Kumar, K., & Yauger, C. (1994). The scanning of task environments in hospitals: An empirical study. *Journal of Applied Business Research*, 10(4), 104-115.
- Sutton, Howard. (1988). Competitive intelligence. New York: The Conference Board.
- Thomas, K. & Allen, S. (2006). The learning organization: A meta-analysis of themes in literature. *The Learning Organization*, 12(2), 123-139.
- Thompson, P.B. (1986). The philosophical foundations of risk. *Southern Journal of Philosophy*, 24(2), 273-286.
- Thompson, J.D. & Scott, W.R. (2003). *Organizations in action: Social science bases of administrative theory.* Somerset, NJ: Transaction Publishers.
- Toon, B.E. Goeltz, R.T., Travis, C.B., & Phillippi, R.H. (1991). Risk communication and the cognitive representation of uncertainty. In B.J. Garrick & W.C. Gekler (Eds.). *The analysis, communication, and perception of risk.* New York: Plenum Press.
- Trist, E. (1983). Referent organizations and the development of inter-organizational domains. *Human Relations*, *36*, *3*, *269-284*.
- Trumbo, C.W. & McComas, K.A. (2003). The function of credibility in information processing for risk perception. *Risk Analysis*, 23(2).
- Trump, K.S. (1997). *Practical school security: Basic guidelines for safe and secure schools.* Thousand Oaks, CA: Sage.
- Trump, K.S. (2000). Classroom killers, hallway hostages?: How schools can prevent and manage school crisis. Thousand Oaks, CA: Sage.
- Trump, K.S. (2002). The impact of terrorism on school safety planning. *School Planning and Management*. 41(7), 22-26.
- Uckun, S., Dawant, B.M., & Kawamura, K. (1991). Uncertainty management in engineering risk assessment. In B.J. Garrick & W.C. Gekler (Eds.). *The analysis, communication, and perception of risk.* New York: Plenum Press.
- United States Department of Education. (2002). Campus public safety: Weapons of mass destruction terrorism protective measures. Retrieved February 26, 2006, from http://www.ed.gov/emergencyplan

- United States Department of Education. (2004). Key policy letters signed by the education secretary or deputy secretary. Retrieved February 26, 2006, from http://www.ed.gov/emergencyplan/
- United States Department of Education. (2004). Practical information on crisis planning: A guide for schools and communities. Retrieved February 26, 2006, from http://www.ed.gov/emergencyplan
- Vettenburg, N. (2002). Unsafe feelings among teachers. *Journal of School Violence*, 1(4) 33-49.
- Vlek, C.A, and Stallen, P.J.M. (1981). Judging risks and benefits in the small and the large. *Organizational behavior and human performance*, 28, 235-271.
- Vogel, J., M.D. (1995). Children don't have it so easy: Stress can take a toll among tots. *Health News & Review*, 15-19.
- Voros, J. (2001). Reframing environmental scanning: An integral approach. Foresight – the journal of future studies, strategic thinking and policy, 3(6).
- Watkins, K & Marsick, V. (1993). Sculpting the learning organization: Lessons for the learning organization. San Francisco: Jossey-Bass.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York: Cambridge University Press.
- West, J.J. (1988). Strategy, environmental scanning, and their effect upon firm performance: An exploratory study of the food service industry. Blacksburg, VA: Virginia Polytechnic Institute and State University. (Ph.D. dissertation).
- West, D.A., Clegg, D.O., & Black, C.D. (1988). Strategic planning: Issue identification and development for the cooperative extension system. Extension Service, USDA.
- Wiedemann, P.M., Clauberg, M., & Schutz, H. (2003). Understanding amplification of complex risk issues: The risk story model applied to the EMF case. In N. Pigeon, R.E. Kasperson, and P.Slovic (eds.) *The social amplification of risk*. United Kingdom: Cambridge University Press.
- Winslow, L. (2006, June 14). Pandemic preparation pushed. *The Tulsa World*, p. B4.
- Wolgalter, M.S., Desaulnier, D.R., & Brelsford, J.W. (1987). Consumer products: How are the hazards perceived? In *Proceedings of human factors society 31st annual meeting*. Santa Monica, CA: Human factors society, pp. 615-619.

- Wolgalter, M.S., DeJoy, D.M., & Laughery. (1999). *Warning and risk communication*. Philadelphia: Taylor & Francis Inc.
- Wood, D.J. & Gray, B. (1991). Toward a comprehensive theory of collaboration. *Journal of Applied Behavioral Science*, 27 (2), 139-162.
- Yeo, R.K. (2005). Revisiting the roots of learning organization: A synthesis of the learning organization literature. *The Learning Organization*, 12,(4), 368-382.
- Yin, R. (1989). Case study research: Design and methods. London: Sage.
- Zander, U. & Kogut, B. (1995). Knowledge and the speed of the transfer and imitation of organizational capabilities: An empirical study. *Organization Science*, 6, 72-92.
- Zilinskas, R.A., Hope, B., & North, D.W. (2004). A discussion of findings and their possible implications from a workshop on bioterrorism threat assessment and risk management. *Risk Analysis*, 24(4).
- Zinn, K. (1999). *After Columbine: A schoolplace violence prevention manual.* Silverton, CO: Spectra.

APPENDICES

APPENDIX A

Initial Phone Contact

Researcher's remarks:

Hi, this is Kathy Williams. I am a Ph.D. student at the University of Oklahoma. I am in the field of Organizational Leadership and I am conducting a study focused on school safety and security planning.

I am calling today to invite you to participate in this important study. Your participation is vital to the understanding of the planning process that takes place at your school concerning school safety and security. By participating, you will be adding to the depth of knowledge that focuses on risk perception, and inter-organizational collaboration.

The purpose of this study is to: a) provide greater insight into the understanding of the theory of a learning organization; b) provide greater insight into the inter-organization collaboration theories of environmental scanning and boundary spanning; c) provide greater insight into the overriding importance of a leader's cognitive representations of risks and its affect on a school's risk management plans, and d) provide greater insight into the differences found in location of public school districts and non public schools as it relates to a school's risk management plans.

By participating you will be able to review this study's findings, provide discussion and insight for your stakeholders, and offer a pathway for the evaluation of the quality and appropriateness of your school safety and security planning process.

Your commitment to this study will include a 30-60 minute interview, completion of a short survey, which will take no longer than 30 minutes, and accessibility to the current school safety and security plan.

Thank you for your time and I look forward to meeting with you.

APPENDIX B

Researcher University Street Address City, State Postal Code

Date of Interview

Educational Leader School or District Street Address City, State Postal Code

Dear Leader's Name,

I am a Ph.D. student in the field of (Department Name), under the direction of (Committee Chair) in the (Department Name), at (Name of University). I invite you to participate in a research study being conducted under the auspices of the (Name of University) entitled (Dissertation Title). The purpose of this study is to examine existing school safety and security planning process, which includes risk management plans, inter-organizational strategies, and the perception of risk of educational leaders.

You are being asked to participate in a personal interview, complete a survey, and furnish the researcher a copy of existing school safety and risk management information. The interview will be conducted by the researcher at a mutually agreed upon location. The researcher will request the existing school safety and risk management information at the time of the interview, and the survey will be returned in an addressed, pre-posted envelope. The interview will take approximately sixty minutes and completion of the survey should take approximately thirty minutes. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time. Your identity will not be associated with your responses. Your survey will be returned to a central location, opened by someone other than the researcher, coded, and your mailing envelope destroyed. The results of the research study may be published, but your name will not be used. In fact, the published results will be presented in summary form only. Your identity will not be associated with your responses in any published format.

The findings from this project will provide information pertaining to existing school safety and security, risk management, inter-organizational collaboration, and the perception of risk/events that affect a stable, safe learning environment. There is no cost to you other than the time it takes to complete the interview and the survey.

If you have any questions about the research project, please feel free to call me at (Researcher's phone number) or send an email to (Researcher's email). Questions about your rights as a research participant or concerns about the project should be directed to the Institutional Review Board at (University Name) at (Institutional Review Board phone number) or (Institutional Review Board email).

By agreeing to be interviewed and by returning the survey in the envelope provided, you are agreeing to participate in the above-described project.

Sincerely,

Researcher

APPENDIX C

Document Analysis and Interview Rubric

. Tł	ne existence of a comprehensive school safety and security plan	Yes	No
1.	An emergency preparedness plan has been developed to		
	address the following emergencies:		
	1. Attack With Firearm		
	2. Alcohol/Drug Use/Trafficking		
	3. Bomb Threat		
	4. Fear/Bullying		
	5. Litigation Threat		
	6. Natural Disaster (earthquake, tornado, hurricane, flood)		
	7. Pandemic		-
	8. Physical Attack/Fight		
	9. Posttraumatic Stress Disorder		
	10. Rape/Sexual Battery		
	11. Suicide		
	12. Terrorism/Bioterrorism Attack		
	Note other specific information related to current school safety an	d secur	ity pla
в. Т	Training for school safety and security plan	Yes	No
υ, 1	training for school safety and security plan	165	110
1.	Training sessions on school safety and security are conducted on at least an annual basis.		
	List type of training, year training was first offered, and number of per year:	f trainiı	ngs he

		APPENDIX C (continued)				
T	ype	year began	#per year			
13	ype	year began	#per year			
Ту	ype	year began	#per year			
Ту	ype	year began	#per year			
Ту	ype	year began	#per year			
Ту	ype	year began	#per year			
rac	ctice Exercises		Yes No			
	Practice exercises are conducted on an annual basis to test the effectiveness and efficiency of school safety plans and procedures					
	List type of drill, year drill was first practiced, and number of drills held per ye (exclude fire and tornado):					
Ту	ype	year began	#per year			
Ту	ype	year began	#per year			
	ype	year began				
Ту			#per year			
	Type year began #per year Note other specific information related to practice exercises:					

APPENDIX C (continued)

О.	Physical Site Changes		Yes No
	1. Needs have been identified		
	List types of changes, identify b	by year, and list funding s	source.
	Change	year	funding
	Systemic Approach Lines of communication are open _		
	Proactive to safety and security plan	nning	
	Safety and security process is built	into the overall system _	

APPENDIX C (Continued) **Inter-Organizational Collaboration:**

Environmental Scanning:

Risks to a stable, safe learning environment have been researched by the educational leader	1
Educational leader has searched for strategies outside of the organization	
Awareness of safety and security issues has increased over the years	
Boundary Spanning:	
Current school safety and security planning process has been developed in collaboration with safety experts	
Has attended several workshops and seminars directed towards school safety and security	
Encourages other within the organization to go outside of the boundaries to search f strategies	or

APPENDIX C (Continued)

Risk Perception:

Gives reasons why safety and security are not a priority
Is open minded and willing to collaborate with others inside and outside of the
organization
Is proactive and demonstrates through actions related to extensiveness of school safety and security planning process
and security planning process

APPENDIX D

Interview Questions

What is your student population?

How long have you been in your current position?

School safety and security planning process:

When was your first school safety and security plan developed?

How are a risk and the appropriate response identified?

Who put together your district/school safety and security plan?

What stakeholders provided input and feedback during the risk assessment, risk analysis, and risk management process (school safety and security plan)?

Who are the stakeholders involved in risk management and school safety and security in your community?

How have you connected with emergency management directors, community emergency first responders, and other authorities on school safety and security?

Have you attended seminars or conferences with a school safety focus?

What research have you done related to safety?

How has your focus changed?

Training (administrators, teachers, staff, students, etc.):

What type of training do you have in place?

Who is trained in risk assessment, risk analysis, risk management, and school safety and security?

Who is trained in emergency first aid and can monitor the administration to the injured?

APPENDIX D (continued)

Interview Questions

Who is trained to assess all those involved for the emotional impact of a breach of school safety and security?

Who is trained to identify what follow-up interventions are available to all those involved in a breach of school safety and security?

Who is trained to facilitate practicing the school safety and security plan?

Current school safety and security plan:

What practice exercises do you have in place at this time?

How often does your district/school practice their existing school safety and security plan procedures? (DO)

Who, outside of your district or school, offers feedback?

How often does your school perform a safety audit to examine school buildings and grounds? (DO)

Who, outside of you school maintenance personnel, conducts this audit?

Physical site changes:

What changes have you made concerning safety?

How did you implement these changes?

Did you apply for grants?

Did your district pass bond issues specifically directed towards safety?

APPENDIX E

Perceived Risk to a Stable, Safe Learning Environment Survey

This survey looks at the various events that may be a risk to a stable, safe learning environment. Please respond to each section. Your responses will remain confidential. Thank you for your participation.

Part One: Please circle the answers that best describe you:

What is your title? Other	Public School	Superintendent -	Non Public	School Leader
What is your gende	r? Male	I	Female	
What is your age gr 50 –		20 – 29	30 – 39	40 – 49
What is your highes Master	st degree earned?	High School	Bachelor	
How do you best de Urban	escribe the location	on of your district	t or school?	Rural
Please answer the	following questi	on. What is you	r school district's or	r school's student

APPENDIX E (continued)

Part Two: The Perception of Risk to a Stable, Safe Learning Environment

Perceived Risk: Please consider the following risk to a stable, safe learning environment from each risk/event. Order and rate the risk/events for their potential risk. Give a rating from 12 to 1 with 12 having the least risk to 1 having the most risk.

Risk/Event		
Attack With Firearm		
Alcohol/Drug Use/Trafficking		
Bomb Threat		
Fear/Bullying		
Litigation Threat		
Natural Disaster (earthquake, tornado, hurricane, flood)		
Pandemic		
Physical Attack/Fight		
Posttraumatic Stress Disorder		
Rape/Sexual Battery		
Suicide		
Terrorism/Bioterrorism Attack		

APPENDIX E (continued)

Part Three: Risk Adjustment Factor For Risk/Event

Please judge the acceptability of the level of risk currently associated with each risk/event. This is not the ideal risk. Ideally, the risk should be zero. The acceptable level is a level, which is 'good enough.' Where 'good enough' means you think that the advantages of increased safety are not worth the costs of reducing risk by restricting or otherwise altering the school environment. For example, fireproof walls could be installed in all school buildings; you may or may not feel this is necessary in the event of a fire from a safety standpoint. If a perceived risk/event's present level is acceptable, no special action need be taken to increase its safety. If its riskiness is unacceptably high, serious action should be taken. On the other hand, there may be some occurrences that you believe are currently safer than the acceptable level of risk. For these occurrences, the risk to a stable, safe learning environment should be higher than it is now before decision makers would have to take serious action.

Put an X under the appropriate column for each risk/event.

Risk/Event	It is Presently Acceptable Could Be Riskier (Not a Concern)	Too Risky to be Acceptable (Concern, Special Action Needed)	Extreme Concern (Serious Action Should be Taken)
Attack With Firearm			
Alcohol/Drug Use/I	Trafficking		
Bomb Threat			
Fear/Bullying			
Litigation Threat			
Natural Disaster (earthquake, tornado, hurri	icane, flood)		
Pandemic			
Physical Attack/Fig	ht		
Posttraumatic Stress	s Disorder		
Rape/Sexual Battery	y		
Suicide			
Terrorism/Bioterror	ism Attack		

APPENDIX E (continued)

Additional Comments

Please include any additional comments you may have regarding establishing and maintaining a stable, safe learning environment:

Thank you for participating in this study!!

Please fold the survey, place it in the envelope, seal the envelope, then either give it to (Researcher's Name),

Or put it in the mail. The mailing address is on the back of this sheet.

APPENDIX F

Summary of Data Related to Description for Each of the 62 Cases

Case	Site	Description
1	NPU	The non public school is located near the downtown area of a large
	1	metropolitan area (urban). The current coed student population is 452, PK-
		12. The current educational leader has been in this position for over 20
		years. Process on safety is not built into the system. No systemic approach
		exists. There is an awareness of safety, yet minimal process. Leader has
		talked about safety with other administrators. Approach to safety is
		reactive and stems from recent incidents at other schools. No safe school
		committee exists. Leader has made minimal contact with safety experts,
		emergency management director, or first responders in the community.
		The leader used other schools' plans to create the current safety plan.
		Leader indicates that safety is something the school administrators have to
		deal with and address one incident at a time. Leader refers to expense as a
		roadblock to implementation of changes both professionally, and to the
		physical site. Leader has talked about safety with other administrators.
		Has designated one person to look into safety concerns, yet this person has
		multiple functions at the school. Plan is basic with focus on fire and
		tornado drills. No practice procedures exist for lockdown or Intruder On
		Campus (IOC). No reference to chemical spills or hazardous chemicals on
		campus. Have minimal faculty and staff trained in CPR, Blood Borne
		Pathogens, or other safety procedures. (Minimal)

2 NPUThe non public school is located in a large metropolitan area (urban). The 2

current coed student population is 291, PK-12. The current educational leader has been in this position for one year. Process on safety is not built into the system. No systemic approach exists. There is an awareness of safety, yet minimal process. Leader is reactive to safety and security planning because of recent incidents at other schools. Little to no contact with safety experts, emergency management director, or first responders in the community has been made. Site used other schools' plans to create their plan. Never thought safety would be as much of an issue as it is now. Realizes that it is important and needs to be addressed. Is willing to take the necessary steps, and is beginning the process at this time. Is new in the position and is unsure of direction and how to focus energy towards safety and security concerns. Leader has talked about safety with other administrators. Has several adults trained in CPR, Blood Borne Pathogens, or other safety procedures. Necessary fire and severe weather drills are completed. Lockdown drills practiced two times last year. No drill for IOC exists. (Minimal)

3 NPUThe non public school is located in a large metropolitan area (urban). The current coed student population is 1,388, PK-12. The current educational

> leader has been in this position for 10+ years. Process on safety is being built into the system. Leader encourages a systemic approach. Awareness of safety has increased over the years. Leader is becoming proactive to safety issues. Has contacted The Department of Homeland Security and

community first responders, but have not physically met. Site used other schools' plans to create existing plan. Leader is beginning to include others from the school community and city in the process. Leader has talked about safety with other administrators. Site has a safe school committee made of administrators. Has some teachers and staff trained in emergency procedures. Leader is including training as an ongoing part of the process. Necessary fire and severe weather drills are completed. Lockdown drills, including IOC drills, practiced two times last year. (Evolving)

4 NPU

The non public school is located in a large metropolitan area (urban). The current coed student population is 130, PK-12. The current educational leader has been in this position for 10+ years. Process on safety is not built into the system. Leader is just beginning to encourage others to focus more on safety and security on a daily basis. No systemic approach exists.

There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Some contact with safety experts, emergency management director, or first responders in the community. Site used other schools' plans to create existing plan. Leader refers to safety as something the school administrators have to deal with and address one incident at a time. Leader refers to expense as a roadblock to implementation of changes both professionally, and to the physical site. Leader has talked about safety with other administrators. Site has a safe school committee

made of administrators, parents, teachers, and students. Has some teachers and staff trained in emergency procedures. Leader is beginning to make this an ongoing part of the process. Leader has applied for a grant for physical safety and security changes to the school buildings. (Minimal+)

5 NPU

5

The non public school is located in a large metropolitan area (urban). The current coed student population is 978, PK-12. The current educational leader has been in this position for 15+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages other within the district to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 2001, and has been updated every year. All administrators, several teachers, parents, students, and

representatives from the community meet each year to revise plan. There is ongoing research by all those involved in the process. (Evolving+)

6 NPU

6

The non public school is located in a large metropolitan area (urban). The current coed student population is 975, PK-12. The current educational leader has been in this position for 5+ years. Process on safety is being built into the system. Leader encourages a systemic approach. Awareness of safety has increased over the years. Leader is becoming proactive to safety issues. Over the years has made contact with several community first responders. However, does not have scheduled meetings at this time. Continually researches safety measures, and takes input from others. Views school safety and security as a priority, and focuses attention to the details of maintaining a stable, safe learning environment. Leader is aware of the randomness of violence that has occurred in other schools. Considers the ongoing and ever changing process will enhance their chances of dealing with risks. Initial plan was established in 2000. Safe school assessment was preformed in 2002. Safe School Team includes parents, board members, cafeteria personnel, Health and Safety Director, nurse, counselor, safety officer, and others. Leader and Safe School Team continually update the plan. There are many practices of lockdown, and IOC drills throughout the school year with students involved. (Evolving +)

7 NPU

The non public school is located in a large metropolitan area (urban). The current coed student population is 205, PK-8. The current educational leader has been in this position for 5+ years. Process on safety has recently

been addressed at a heightened level. Is not built into the system at this time, but indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Leader contacted Office of Homeland Security for input on a safety plan in 2006. Leader also contacted Head of Crime Commission for an in-service day with faculty, staff, and parents in 2006. However, community first responders have not been contacted. Never thought safety would be as much of an issue as it is now. Realizes that it is important and needs to be addressed. Is willing to take the necessary steps, and is beginning the process at this time. First written plan developed in 2006. Site used other schools' plan as a guide. Leader is developing a plan for single entry into building. Has changed locks on doors. School has an ongoing training process for emergency first aid. Hope to keep 75% trained in the future. Practice lockdown drills 2 times a year. Do not have an IOC drill in place at this time. (Minimal)

8 NPU

8

The non public school is located in a large metropolitan area (urban). The current coed student population is 884, 9-12. The current educational leader has been in this position for 2+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research

on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages other within the school to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 1990, and is updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. There is ongoing research concerning safety by all those involved in the process. There is a specific focus on drug and alcohol abuse. Detection canines used during school hours and at extra-curricular functions. Practice of lockdown and IOC drills carried on through out the school year. Different scenarios used for each drill. Students involved. (Exemplary)

9 NPU

9

The non public school is located in a large metropolitan area (urban). The current coed student population is 310, PK-12. The current educational leader has been in this position for 2+ years.. Leader is just beginning to encourage others to focus more on safety and security on a daily basis. No systemic approach exists. There is an awareness of safety, with an

increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Leader is aware of some safety issues because of location next to apartment complex. Leader has made little to no contact with safety experts, emergency management director, or first responders in the community. Other schools' plans were used to create current plan. Understands that time, money, and focus are needed to address the risks. A plan was put in place over 20 years ago, but has had minimal changes until 2006. Leader did hire a retired police officer that gives feedback after lockdown, fire, and tornado drills. Do not have an IOC drill in place at this time. (Minimal)

10 PU The public school district is located in a large metropolitan area (urban).

1

The current coed student population is 9,331, PK-12. The current educational leader has been in this position for 20+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages other within the district to do the same. Leader utilized a survey to gather information concerning

school safety. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 1988, and updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. There is ongoing research concerning safety by all those involved in the process. Has a fulltime school resource officer on staff. Leader applied for and received grants for safety. Uses bond money for safety. There is a specific focus on drug and alcohol abuse. Detection canines used during school hours, and at extracurricular functions. Site is a Medical Emergency Response Center. Site utilizes National Incident Command System. Has continually updated sites, and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year with students. (Exemplary+)

11 NPU

10

The non public school is located in a large metropolitan area (urban). The current coed student population is 116, PK-12. The current educational leader has been in this position for 3+ years. Process on safety is not built into the system. No systemic approach exists. There is an awareness of safety, yet minimal process. Leader is reactive to safety and security planning process because of recent incidents at other schools. No contact

with safety experts, emergency management director, or first responders in the community. Leader is aware of the importance of safety and security issues. Understands that time and focus are needed to address the risks, yet seemed unconcerned. No plan exists at this time. Leader is trying to keep doors locked and hoping to put safety bars on the doors. Practice fire and tornado drills. Not other practice drills in place. (Minimal)

12 PR

1

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,141, PK-12. The current educational leader has been in this position for 20+ years. Process on safety has recently been addressed at a heightened level. Is becoming a greater part of the system at this time, and indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Leader has completed research on school safety. Open lines of communication with safety experts, emergency management director, and first responders in the community. Leader is aware of the importance of safety and security issues. Understands that time, money, and focus are needed to address the risks. Renewed process beginning in 2006. A plan was put into place in 2001. Worked with community first responders, administrators, and used other school's plans. Revisions have been ongoing with a specific emphasis in 2006. Practice lockdown and IOC drills at least two times each year. (Evolving)

13 PU The public school district is located in a large metropolitan area (urban).

2

1

The current coed student population is 5,978, PK-12. The current educational leader has been in this position for 8+ years. Process on safety has recently been addressed at a heightened level. Is not built into the system at this time, but indicates that it is something that will be constantly monitored from now on. Leader is reactive to safety and security planning process because of recent incidents at other schools. Contact with safety management consultant three years ago. Recently made contact with safety experts, emergency management director, and first responders in the community. Leader is aware of the importance of safety and security issues. Understands that time, money, and focus are needed to address the risks. Renewed process beginning in 2006. A plan was put into place in 2003. Leader worked with a consultant. Had a security officer, but funds are no longer available. Leader is hoping to reinstate this year. Planning practice drills and table top drills for 2007. (Evolving)

14 NPR The non public school is located away from a large metropolitan area

(rural). The current coed student population is 170, PK-12. The current educational leader has been in this position for 1+ years. Process on safety is being built into the system. Systemic approach is encouraged by leader. Awareness of safety has increased over the years. Leader is becoming proactive to safety issues. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader is beginning to implement changes on an ongoing basis, and is

aware of the importance of safety and security issues. Understands that time, money, and focus are needed to address the risks. Continued process even before taking position. Uncertain when first plan was drafted. Extensive revisions made in 2006. Leader has talked about safety with other administrators. Site has a crisis team made of administrators, teachers, students, parents, and emergency first responders. Have several teachers and staff members trained in emergency procedures. Leader is making safety and security an ongoing process. Lockdown drills practiced one time last year and scheduled for two times this year. (Evolving)

15 NPU

11

The non public school is located in a large metropolitan area (urban). The current coed student population is 580, 6-12. The current educational leader has been in this position for 5+ years. Process on safety is being built into the system. Systemic approach is encouraged by leader.

Awareness of safety has increased over the years. Leader is becoming proactive to safety issues. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader has implemented changes on an ongoing basis. Leader is aware of the importance of safety and security issues. Understands that time and process are needed to address the risks. Continued process even before taking position. Leader has talked about safety with other administrators. Have a crisis team made of administrators, teachers, students, parents, and emergency first responders. Have all teachers and staff trained in emergency procedures. Leader is making safety and security an ongoing

process. Lockdown drills practiced one time last year. (Evolving)

16 NPU

12

The non public school is located in a large metropolitan area (urban). The current coed student population is 396, PK-8. The current educational leader has been in this position for 1+ years. Process on safety has recently been addressed at a heightened level. Is building the process into the system at this time, and indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased process. Leader is very proactive in the safety and security planning process. Leader has created even more of a process because of recent incidents at other schools. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader has implemented changes on an ongoing basis. Leader is aware of the importance of safety and security issues. Understands that time, money, and focus are needed to address the risks. Continued process even before taking position. Leader is very self-motivated and proactive. First plan established in 2000. Each year has been updated. Since becoming the educational leader, has formed a safety committee, brought in a team of safety consultants, and initiated changes in policy and procedures, and to the physical site. Practice of lockdown and IOC drills scheduled for three times throughout the year. (Evolving+)

17 NPU

13

The non public school is located in a large metropolitan area (urban). The current coed student population is 47, PK-5. The current educational leader has been in this position for 1+ years. Process on safety is built into

the larger system in which the school is housed. Others within the Center complex were involved in researching and inquiring into the community concerning safety and security at the complex. Contact was made with community first responders and other community organization concerning safety and security at the center. There was extensive involvement from different departments within the center. Leader has a large network of community organizations that are available at all times. Leader was not concerned about safety of the physical site, because it had been addressed by others. Leader was aware of recent incidents and concerned about maintaining a safe, secure learning environment, yet thought it was taken care of by others. First plan established in 2003. It has been updated each year since then. There are tornado, fire, and lockdown procedures included, but no IOC plan. All external doors are locked at all times. Receptionist at the front desk receives all visitors through single entrance. (Evolving)

18 PR

2

The public school district is located away from a large metropolitan area (rural). The current coed student population is 2,428, PK-12. The current educational leader has been in this position for 10+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district,

and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages other within the district to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 1998, and is updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Site has a specific focus on drug and alcohol abuse. Detection canines used during school hours and at extra-curricular functions. Has a fulltime campus police officer on staff. Site also has four other resource officers. Applied for and received grants for safety. Uses bond money for safety. Has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year. (Exemplary+)

19 NPU

15

The non public school is located in a large metropolitan area (urban). The current coed student population is 4,683, PK-12. The current educational

leader has been in this position for 5+ years. Stresses open lines of

communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages other within the district to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 1990, and is updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Site has a specific focus on drug and alcohol abuse. Detection canines used during school hours and at extra-curricular functions. (Exemplary)

3

current educational leader has been in this position for 6+ years. Stresses

²⁰ PU

The public school district is located very near to a large metropolitan area (urban). The current coed student population is 14,725, PK-12. The

open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages other within the district to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 1996, and is updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Site has a specific focus on drug and alcohol abuse. Detection canines used during school hours and at extra-curricular functions. Site has four resource officers. Applied for and received grants for safety. Uses bond money for safety. Has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing

with several held throughout the year. (Exemplary+)

21 PR

3

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,400, PK-12. The current educational leader has been in this position for 4+ years. Process on safety has been addressed at a heightened level. Is building the process into the system at this time, and indicates that it is something that will be constantly monitored from now on. Leader is very proactive in the safety and security planning process. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader has implemented changes on an ongoing basis. Leader is aware of the importance of safety and security issues. Understands that time, money, and focus are needed to address the risks. Continued process even before taking position. Leader is very self-motivated and proactive. First plan established in 2002. Each year has been updated. Since becoming the educational leader, has formed a safety committee, brought in a team of safety consultants, and initiated changes in policy and procedures, and to the physical site. Practice of lockdown and IOC drills scheduled for three times throughout the year. (Evolving+)

22 PU

4

The public school district is located very near to a large metropolitan area (urban). The current coed student population is 7,078, PK-12. The current educational leader has been in this position for 5+ years. Leader is establishing open communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages

research, feedback, and implements other's ideas. Systemic approach is beginning to evolve. Research on safety is ongoing. New buildings built with safety in mind. Some contact with community first responders.

Leader is beginning to schedule meetings on a consistent basis. Leader indicates that being proactive in dealing with safety is the key to making an effective plan. Leader desires to focus more time, money, and energy towards safety as the district grows. Is bringing more community input into the process. First plan made in the mid 90s, and updated every year by administrators, teachers, parents, and students. Leader brought in representatives from community first responders this year to revise plan. Ongoing research concerning safety by all those involved in the process. Site has allocated bond money towards enhancing safety. (Evolving +)

23 PR

The public school district is located away from a large metropolitan area (rural). The current coed student population is 384, PK-8. The current educational leader has been in this position for 6+ years. Safety has a minimal process. All aspects required by law are addressed but are not built into the system. Leader addresses safety as something else to have to focus on rather than academics. Leader is aware of safety issues and incidents at other schools. Leader has done a minimal amount of inquiry concerning safety. Leader has made minimal contact with emergency first responders in the community. Occasionally talks with county law enforcement, but not on a scheduled basis. No one has offered feedback after fire or tornado drills. Leader indicated that by knowing the students

there is less of a chance of an incident occurring. Recent incidents at other schools have heightened the awareness, but have not caused an over reaction. Leader indicates that each situation is best handled through the office of the superintendent. There is minimal encouragement for others to get involved. First plan was made in 2003. A representative from the Department of Civil Emergency Management, along with the county Emergency Management Director, was involved in the initial plan. Much of the insights were directed towards natural disasters. The plan is consistent with the basic plan used at several other school districts. Plan was reviewed each year and has had minimal changes made. Safe school committee meetings are inconsistent and have brought forth a few recommendations. No written lockdown drill is in place nor is there a written IOC drill. Have talked through such drills, but have never practiced one. (Minimal)

24 PR

5

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,010, PK-8. The current educational leader has been in this position for 3+ years. Safety has a minimal process. All aspects required by law are addressed, and are becoming a more integral part of the system. Leader addresses safety as something that will require more of a process. Leader is beginning to encourage others in the district to attend meetings and workshops that process on safety. Leader is aware of safety issues and incidents at other schools. Leader has done a minimal amount of inquiry concerning safety,

and has made minimal contact with emergency first responders in the community. Leader is just starting to build a network within the community. In the past had occasionally talked with county law enforcement, but not on a scheduled basis. No one has offered feedback after fire or tornado drills. Recent incidents at others schools have heightened the awareness, and have caused a more focused approach to safety. Leader stressed the need to make physical changes to all sites within the district, and to think more about practicing drills. Leader's perception of risks to a stable, safe learning environment has drastically changed over the years. First plan was made in 1999. A representative from the Department of Civil Emergency Management, along with the county Emergency Management Director was involved in the initial plan. Much of the insights were directed towards natural disasters. No changes had been made since then. The plan is being updated at this time. No drill has been established for a lockdown, nor is there one for an ICO. (Minimal)

25 NPU

16

The non public school is located in a large metropolitan area (urban). The current coed student population is 994, PK-12. The current educational leader has been in this position for 3+ years. Leader is establishing open communication with all community first responders, board members, faculty, staff, parents, and students. Leader encourages research, feedback, and implements other's ideas. Systemic approach is beginning to evolve. Research on safety is ongoing. New buildings built with safety in mind.

Some contact with community first responders. Leader is beginning to schedule meetings on a consistent basis. Leader indicates that being proactive in dealing with safety is the key to making an effective plan. Leader desires to focus more time, money, and energy towards safety. Is bringing more community input into the process. First plan made in the mid 90s, and updated every year by administrators, teachers, parents, and students. Site hired a security officer in late 90s. Leader brought in representatives from community first responders this year to revise plan. Ongoing research concerning safety by all those involved in the process. Site has allocated money towards enhancing safety. (Evolving +)

26 PU The public school district is located in a large metropolitan area (urban).

5

The current coed student population is 42,000, PK-12. The current educational leader has been in this position for 20+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages others within the district to do the same. Leader indicates that the more you are aware of

potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 1988, and updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Has a fulltime school resource officer on staff at each site. Applied for and received grants for safety. Applied for and received grant money for school safety. Uses bond money for safety. Site has a specific process on drug and alcohol abuse. Detection canines used during school hours and at extra-curricular functions. Site is a Medical Emergency Response Center. Leader has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year. (Exemplary+)

27 PR

6

The public school district is located away from a large metropolitan area (rural). The current coed student population is 5,311, PK-12. The current educational leader has been in this position for 3+ years. Leader is establishing open communication with all community first responders, board members, faculty, staff, parents, and students. Encouraging research, feedback, and implements other's ideas. Systemic approach is beginning to evolve. Leader is aware of safety issues and incidents at other schools.

Has done many years of research concerning safety and changes it has created in the learning environment. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader has implemented changes on an ongoing basis.

Leader indicates that being proactive in dealing with safety is the key to making an effective plan. Leader desires to focus more time, money, and energy towards safety. Is bringing more community input into the process. First plan made in 2001. Leader used other schools' plans as a guideline. The plan is consistent with the basic plan used at several other school districts. Plan was reviewed this year and many changes were made. Practice of lockdown and IOC drills takes place at least two times a year. (Evolving)

28 PR

The public school district is located away from a large metropolitan area (rural). The current coed student population is 170, PK-8. The current educational leader has been in this position for 3+ years. Leader is establishing open communication with all community first responders, board members, faculty, staff, parents, and students. Encouraging research, feedback, and implements other's ideas. Systemic approach is beginning to evolve. Research on safety is ongoing. New buildings built with safety in mind. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader has implemented changes on an ongoing basis. Leader indicates that being proactive in dealing with safety is the key to making an effective plan.

Leader desires to focus more time, money, and energy towards safety. Is bringing more community input into the process. First plan made in 2001. Leader used other schools' plans as a guideline. The plan is consistent with the basic plan used at several other school districts. Plan was reviewed this year and many changes were made. Practice of lockdown and IOC drills will take place this year. (Evolving -)

29 PR

8

The public school district is located away from a large metropolitan area (rural). The current coed student population is 4,100, PK-12. The current educational leader has been in this position for 3+ years. Leader is

educational leader has been in this position for 3+ years. Leader is establishing open communication with all community first responders, board members, faculty, staff, parents, and students. Encouraging research, feedback, and implements other's ideas. Systemic approach is beginning to evolve. Research on safety is ongoing. New buildings built with safety in mind. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader has implemented changes on an ongoing basis. Leader indicates that being proactive in dealing with safety is the key to making an effective plan. Leader desires to focus more time, money, and energy towards safety. Is bringing more community input into the process. First plan made in 2001. Leader used other schools' plans as a guideline. The plan is consistent with the basic plan used at several other school districts. Plan was reviewed this year and many changes were made. Each site has a plan that is specific to its location. Practice of lockdown and IOC drills takes place

at each site at least two times a year. Grants have been awarded for safety and bond money has been directed towards safety. (Evolving+)

30 PR

9

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,200, PK-12. The current educational leader has been in this position for 3+ years. Process on safety is not built into the system. Leader is just beginning to encourage others to focus more on safety and security on a daily basis. Evolving systemic approach exists. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. However, has been researching school safety for about a year. Leader has met with safety experts, emergency management director, or first responders in the community. Leader has implemented changes as needed. Leader is aware of the importance of safety and security issues. Understands that money, time, and focus are needed to address the risks, and is concerned. First plan made in 2000. Site used other schools' plans as a guideline. The plan is consistent with the basic plan used at several school districts. Plan was reviewed this year and some changes being made. Have some teachers and staff trained in emergency procedures. Leader is beginning to make this an ongoing part of the process. Bond money is allocated for physical safety and security changes to the school buildings. (Evolving)

31 PR

10

The public school district is located away from a large metropolitan area (rural). The current coed student population is 2,450, PK-12. The current

190

educational leader has been in this position for 15+ years. Process on safety is being built into the system. Systemic approach is encouraged by leader. Awareness of safety has increased over the years. Leader is becoming proactive to safety issues. Leader has researched safety for years. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader has implemented changes on an ongoing basis. Leader indicates that being proactive in dealing with safety is the key to making an effective plan. Leader is aware of the importance of safety and security issues. Understands that time, focus, and money are needed to address the risks. First plan developed in 2002. Leader has talked about safety with other administrators and community first responders for many years. Site has a crisis team made of administrators, teachers, students, parents, and emergency first responders. Site has many teachers and staff trained in emergency procedures. Leader is making safety and security an ongoing process. Lockdown and IOC drills practiced at least two times a year. Site is designated as a Medical Emergency Response Center and has practiced for a Pandemic Epidemic. (Evolving+)

32 PR

The public school district is located away from a large metropolitan area

11

(rural). The current coed student population is 1,316, PK-12. The current educational leader has been in this position for 5+ years. There appeared to be a directed process on safety, yet when questioned further, the process is superficial and minimal. No systemic approach exists. There is an

awareness of safety, yet minimal process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Leader met with a consulting group and formed a committee to address safety concerns. However, there is a lack of confidence in the received information. Leader perceives all risks as individual incidents that cannot be planned for. The feedback from outside experts is not considered reliable, because all cases are different. Leader's approach is reactive and relies on common sense. Original plan made in 2001. Consultant group came in 2005 and made changes in the plan. In 2006 the leader formed a group consisting of representatives from community first responders, administrators, teachers, and parents to make further changes. Had a lockdown drill in writing, but had never practiced it until 2005. False alarm, which caused enactment of drill, caused leader to update plan. (Minimal)

33 PR

12

(rural). The current coed student population is 982, PK-12. The current educational leader has been in this position for 13+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all

The public school district is located away from a large metropolitan area

community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages others within the district to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 1997, and updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Applied for and received grant money for school safety. Uses bond money for safety. Site is designated as a Medical Emergency Response Center Leader has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year. (Exemplary)

34 PR

13

The public school district is located away from a large metropolitan area (rural). The current coed student population is 158, PK-12. The current educational leader has been in this position for 1+ years. No systemic approach exists. There is an awareness of safety, yet minimal process. No contact with community first responders. Leader's perception of risk to the learning environment is very low at this time. Feels size of school and

rural location creates less risks. Is new in the position and is unsure of direction and how to focus energy towards safety and security concerns. Site has a very minimal plan in place. No practice of lockdown or IOC drills. (Minimal)

35 PR

14

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,800, PK-12. The current educational leader has been in this position for 4+ years. Process on safety has recently been addressed at a heightened level. Is not built into the system at this time, but indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Some contact with safety experts, emergency management director, or first responders in the community. Site used other schools' plans to create their plan. Leader's perception of risk to the learning environment is focused on counselors and problem students. Money, time, and changes within the district have focused on current problem students. Is aware of outside threats, but feels there is not really a way to control others. First plan developed in 2000, very generic. Put together by administrators. Plan has been modified with updates of contact numbers. No practice of lockdown or IOC drills. No feedback from safety experts. (Minimal)

36 PR

The public school district is located away from a large metropolitan area

(rural). The current coed student population is 370, PK-12. The current

educational leader has been in this position for 2+ years. No systemic approach exists. There is an awareness of safety, yet minimal process.

Leader has made minimal contact with emergency first responders in the community. Occasionally talks with county law enforcement, but not on a scheduled basis. No one has offered feedback after fire or tornado drills.

Leader is aware of the importance of safety and security issues.

Understands that time and focus are needed to address the risks, yet seemed unconcerned. Site has a minimal plan in place. No practice of lockdown or IOC drills. (Minimal)

37 PR

16

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,600, PK-12. The current educational leader has been in this position for 6+ years. Leader is establishing open communication with all community first responders, board members, faculty, staff, parents, and students. Encouraging research, feedback, and implements other's ideas. Systemic approach is beginning to evolve. There is an awareness of safety, with an increased process. Leader is becoming more proactive to safety and security planning process because of recent incidents at other schools. Research on safety is ongoing. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader has implemented changes on an ongoing basis. Leader indicates that being proactive in dealing with safety is the key to making an effective plan. Leader desires to focus more time, money, and energy towards safety. Is

bringing more community input into the process. First plan made in 2002. Site used other schools plans as a guideline. The plan is consistent with the basic plan used at several other school districts. Plan was reviewed this year and many changes were made. Practice of lockdown and IOC drills take place at least two times each year. (Evolving)

38 PR

17

The public school district is located away from a large metropolitan area (rural). The current coed student population is 2,300, PK-12. The current educational leader has been in this position for 4+ years. Leader is establishing open communication with all community first responders, board members, faculty, staff, parents, and students. Encouraging research, feedback, and implements other's ideas. Systemic approach is evolving. There is an awareness of safety, with an increased process. Leader is becoming more proactive to safety and security planning process because of recent incidents at other schools. Research on safety is ongoing. Leader has met with community first responders and other community organizations concerning safety and security risks. Leader has implemented changes on an ongoing basis. Leader indicates that being proactive in dealing with safety is the key to making an effective plan. Leader desires to focus more time, money, and energy towards safety. Is bringing more community input into the process. A very generic plan was put into place in 1996. Leader worked with a consultant in 1998 to revise plan. The existing plan is being updated in 2006. Hired a school resource officer in 2001 through a grant and now is funded through school budget.

Each site completes practice drills and table top drills at least two times per year. Feedback comes from community first responders. (Evolving+)

39 NPU

17

The non public school is located in a large metropolitan area (urban). The current coed student population is 264, PK-8. The current educational leader has been in this position for 1+ years. Process on safety has recently been addressed at a heightened level. Is beginning to be built into the system at this time, and indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased process. Leader is becoming more proactive to safety and security planning process because of recent incidents at other schools. Research on safety is ongoing. Some contact with safety experts, emergency management director, or first responders in the community. Site used other schools' plans to create their plan. Leader indicates that being proactive in dealing with safety is the key to making an effective plan. Leader desires to focus more time, money, and energy towards safety. Is bringing more community input into the process. First plan developed in 2005, very generic. Put together by administrators with consultation from emergency first responders. Plan has been modified with updates in 2006. One practice of lockdown and IOC drills in 2006. No feedback from safety experts. (Evolving-)

40 PR

17

The public school district is located away from a large metropolitan area (rural). The current coed student population is 470, PK-12. The current educational leader has been in this position for 4+ years. No systemic

approach exists. There is an awareness of safety, yet minimal process.

Leader has made minimal contact with emergency first responders in the community. Occasionally talks with county law enforcement, but not on a scheduled basis. No one has offered feedback after fire or tornado drills. Leader is aware of the importance of safety and security issues.

Understands that time and focus are needed to address the risks, yet seemed unconcerned. Site has a minimal plan in place. No practice of lockdown or IOC drills. (Minimal-)

41 PR

18

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,900, PK-12. The current educational leader has been in this position for 2+ years. Process on safety is not built into the system. Leader is just beginning to encourage others to focus more on safety and security on a daily basis. No systemic approach exists. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Some contact with safety experts, emergency management director, or first responders in the community. Site used other schools plans to create their plan. Never thought safety would be as much of an issue as it is now. Realizes that it is important and needs to be addressed. Is willing to take the necessary steps, and is beginning the process at this time. Leader is trying to become proactive rather than reactive. First plan developed in 2000, very generic. Put together by administrators. Existing plan has been modified with updates of contact

numbers. Practice of lockdown and IOC drills takes place at least two times a year. Feedback from safety experts after fire, tornado, and lockdown drills. (Minimal+)

42 PR

19

The public school district is located away from a large metropolitan area (rural). The current coed student population is 45, PK-6. The current educational leader has been in this position for 5+ years. No systemic approach exists. There is an awareness of safety, yet minimal process. Leader has made minimal contact with community first responders. Leader's perception of risk to the learning environment is very low at this time. Feels size of school and rural location creates less risks. Leader relies on community to be aware of anyone or anything out of the ordinary. Site has a minimal plan in place. No practice of lockdown or IOC drills. (Minimal-)

43 PR

20

The public school district is located away from a large metropolitan area (rural). The current coed student population is 400, PK-6. The current educational leader has been in this position for 1+ years. No systemic approach exists. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Leader has made minimal contact with emergency first responders in the community. Occasionally talks with county law enforcement, but not on a scheduled basis. No one has offered feedback after fire or tornado drills. It is something the school administrators have to deal with and address one incident at a time. Leader

perceives all risks as individual incidents that cannot be planned for.

Leader prefers to deal with issues on a personal basis. Leader's approach is reactive and relies on common sense. Site has a minimal plan in place. No

practice of lockdown or IOC drills. (Minimal-)

44 PR

21

The public school district is located away from a large metropolitan area (rural). The current coed student population is 4,400, PK-12. The current educational leader has been in this position for 15+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages others within the district to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 1994, and updated every year. All administrators, several teachers, parents, students, and

representatives from the community meet each year to revise plan.

Ongoing research concerning safety by all those involved in the process.

Applied for and received grant money for school safety. Uses bond money for safety. Is a Medical Emergency Response Center Leader has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year. (Exemplary+)

45 PR

22

The public school district is located away from a large metropolitan area (rural). The current coed student population is 350, PK-12. The current educational leader has been in this position for 7+ years. No systemic approach exists. There is an awareness of safety, yet minimal process. Leader has made minimal contact with emergency first responders in the community. Occasionally talks with county law enforcement, but not on a scheduled basis. Fire chief has offered feedback after fire and tornado drills. It is something the school administrators have to deal with and address one incident at a time. Leader perceives all risks as individual incidents that cannot be planned for. Leader prefers to deal with issues on a personal basis. Leader's approach is reactive and relies on common sense. First plan was made in 2003. Site used another schools plan as a guideline. The plan is consistent with the basic plan used at several other school districts. Plan is being reviewed this year. Practice of lockdown and IOC drills takes place at least two times a year. (Minimal)

46 PR The public school district is located away from a large metropolitan area

(rural). The current coed student population is 1,700, PK-12. The current educational leader has been in this position for 9+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages other within the district to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 2000, and updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. District has applied for and received grants focused on school safety. Practice of lockdowns and IOC drills several times through out the year with students. (Evolving+)

23

47 PR The public school district is located away from a large metropolitan area

(rural). The current coed student population is 1,300, PK-12. The current educational leader has been in this position for 2+ years. Process on safety is not built into the system. Leader is just beginning to encourage others to focus more on safety and security on a daily basis. No systemic approach exists. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Some contact with safety experts, emergency management director, or first responders in the community. Never thought safety would be as much of an issue as it is now. Realizes that it is important and needs to be addressed. Is willing to take the necessary steps, and is beginning the process at this time. Leader is trying to become proactive rather than reactive. Site used another school's plan as a guideline. The plan is consistent with the basic plan used at several other school districts. Plan is being reviewed this year. Practice of lockdown and IOC drills takes place at least two times a year. (Minimal)

48 PR

25

24

The public school district is located away from a large metropolitan area

(rural). The current coed student population is 5,275, PK-12. The current educational leader has been in this position for 2+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district,

and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages other within the district to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being prepared for risks. First plan made in 1996, and is updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Applied for and received grant money for school safety. Uses bond money for safety. Has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year. (Exemplary)

49 PR

26

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,102, PK-12. The current educational leader has been in this position for 2+ years. Process on safety is not built into the system. Leader is just beginning to encourage others to focus more on safety and security on a daily basis. No systemic approach exists. There is an awareness of safety, with an increased process. Leader

is reactive to safety and security planning process because of recent incidents at other schools. Some contact with safety experts, emergency management director, or first responders in the community. Site used other schools plans to create their plan. Never thought safety would be as much of an issue as it is now. Realizes that it is important and needs to be addressed. Is willing to take the necessary steps, and is beginning the process at this time. Leader is trying to become proactive rather than reactive. First plan developed in 2000, very generic. Put together by administrators. Plan has been modified with updates of contact numbers. Talked through practice of lockdown and IOC drills last year, but did not follow through at all sites. (Minimal)

50 PR

27

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,850, PK-12. The current educational leader has been in this position for 3+ years. Process on safety has recently been addressed at a heightened level. Is becoming a greater part of the system at this time, and indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Leader has completed some research on school safety. Open lines of communication with safety experts, emergency management director, and first responders in the community. Leader is aware of the importance of safety and security issues. Understands that time, money, and focus are needed to address the

risks. Renewed process beginning in 2006. A plan was put into place in 2001. Worked with community first responders, administrators, and used other school's plans. Revisions have been ongoing with a specific emphasis in 2006. Applied for and received grants for school safety.

Detection Canines utilized for drug and alcohol checks. Practice lockdown and IOC drills at least two times this year. (Evolving)

51 PR

28

The public school district is located away from a large metropolitan area (rural). The current coed student population is 2,315, PK-12. The current educational leader has been in this position for 20+ years. Stresses open lines of communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Systemic process has been utilizes for at least ten years. Leader is very proactive regarding safety. Research on safety is ongoing. Has clearly searched for strategies outside of district, and expects others to do the same. Open communication with all community first responders. Leader attends scheduled meetings with community first responders. Has attended several workshops and seminars directed towards school safety. Leader encourages other within the district to do the same. Leader indicates that the more you are aware of potential risks, the more you plan for the risks, and the more you practice for the risks, the safer the learning environment will be. However, even though you can take as many precautions as possible, you cannot keep everyone safe at all times. Building the process into the system is the key to being

prepared for risks. First plan made in 1996, and updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Ha one resource officer on staff. Applied for and received grant money for school safety. Uses bond money for safety. Has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year. (Exemplary)

52 PR

29

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,300, PK-12. The current educational leader has been in this position for 12+ years. Process on safety has recently been addressed at a heightened level. Is beginning to be built into the system at this time, and indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased focus. Leader is becoming more proactive to safety and security planning process because of recent incidents at other schools.

Research on safety is ongoing. Some contact with safety experts, emergency management director, or first responders in the community.

Site used other schools' plans to create their plan. Leader indicates that being proactive in dealing with safety is the key to making an effective plan. Leader desires to focus more time, money, and energy towards

safety. Leader is bringing more community organizations' input into the

process. First plan developed in 1990s, very generic. Put together by administrators, and modified throughout the years. Plan has been modified with updates in 2006. Two to three practices of lockdown and IOC drills in 2006. No feedback from safety experts. (Evolving)

53 PR

30

The public school district is located away from a large metropolitan area (rural). The current coed student population is 2,500, PK-12. The current educational leader has been in this position for 6+ years. Open communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Research on safety is ongoing. Leader has attended several workshops and seminars focused on school safety. Several other employees are interested in safety. Open communication with all community first responders. Scheduled meetings take place on a consistent basis. Used input from meetings to update existing plan. Leader indicates that school safety is a priority. Being proactive has made the process easier to address. Leader indicates that when you build safety into your budget and your process, you can make a plan that is effective. First plan made in 2002, and updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. (Evolving+)

54 PR

The public school district is located away from a large metropolitan area

(rural). The current coed student population is 2,450, PK-12. The current

educational leader has been in this position for 3+ years. Process on safety has recently been addressed at a heightened level. Is becoming a greater part of the system at this time, and indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Leader has completed some research on school safety. Open lines of communication with safety experts, emergency management director, and first responders in the community. Leader is aware of the importance of safety and security issues. Understands that time, money, and focus are needed to address the risks. Renewed process beginning in 2006. A plan was put into place in 2000. Worked with community first responders, administrators, and used other school's plans. Revisions have been ongoing with a specific emphasis in 2006. Practice lockdown and IOC drills at least two times each year. (Evolving)

55 PR

The public school district is located away from a large metropolitan area

32

(rural). The current coed student population is 550, PK-12. The current educational leader has been in this position for 3+ years. Process on safety is not built into the system. Leader is just beginning to encourage others to focus more on safety and security on a daily basis. No systemic approach exists. There is an awareness of safety, with an increased process. Leader is reactive to safety and security planning process because of recent incidents at other schools. Leader has made minimal contact with

emergency first responders in the community. Occasionally talks with county law enforcement, but not on a scheduled basis. No one has offered feedback after fire or tornado drills. Leader utilizes ideas from previous position at another district. Perceives risks to stable, safe learning environment as an ongoing process, yet feels culture of the community, funding, and other priorities limit capabilities. Site used other schools' plans as a guideline. The plan is consistent with the basic plan used at several other school districts. Plan is being reviewed this year. Practice of lockdown and IOC drills takes place at least two times a year. (Minimal)

56 PR

33

(rural). The current coed student population is 1,154, PK-12. The current educational leader has been in this position for 8+ years. Open communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Research on safety is ongoing. Leader has attended several workshops and seminars focused on school safety. Several other employees are interested in safety. Open communication with all community first responders. Scheduled meetings take place on a consistent basis. Used input from meetings to update

existing plan. Leader indicates that school safety is a priority. Being

proactive will make the process easier to address. Leader indicates that

when you build safety into your budget and your process, you can make a

plan that is effective. First plan made in 1995, and updated every year. All

The public school district is located away from a large metropolitan area

administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Has a fulltime school resource officer on staff. Applied for and received grants for safety. Uses bond money for safety. Site is a Medical Emergency Response Center. Site is being trained in National Incident Command System. Has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year. (Exemplary)

57 PR

PK

34

The public school district is located away from a large metropolitan area (rural). The current coed student population is 772, PK-12. The current educational leader has been in this position for .5+ years. Process on safety has recently been addressed at a heightened level. Is beginning to be built into the system, and indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased process. Becoming proactive to safety and security planning process, and because of recent incidents at other schools, has tightened security measures. Increased contact with emergency first responders in the community. Leader has scheduled meetings with county law enforcement. Board members have expressed interest and attend administrative meetings focused on safety. However, no one has offered feedback after fire, tornado, lockdown, or IOC drills. Leader utilizes ideas from previous position at another district. Leader indicates that school safety is a priority.

Being proactive will make the process easier to address. Leader indicates that when you build safety into your budget and your process, you can make a plan that is effective. Uncertain when first plan was established. Previous educational leader used other schools' plans as a guideline. Existing plan is consistent with the basic plan used at several other school districts. Plan is being revised. Practice of lockdown and IOC drills will take place at least two times a year. (Evolving-)

58 PR

35

(rural). The current coed student population is 600, PK-12. The current

The public school district is located away from a large metropolitan area

educational leader has been in this position for 1+ years. Process on safety has recently been addressed at a heightened level. Is beginning to be built into the system, and indicates that it is something that will be constantly monitored from now on. There is an awareness of safety, with an increased process. Becoming proactive to safety and security planning process, and because of recent incidents at other schools, has tightened security measures. Increased contact with emergency first responders in the community. Leader scheduled meetings with county law enforcement. Board members have expressed interest and attend administrative meetings focused on safety. However, no one has offered feedback after fire, tornado, lockdown, or IOC drills. Leader utilizes ideas from previous position at another district. Leader indicated that character education is

very important and that by knowing the students there is less of a chance of an incident occurring. Recent incidents at other schools have heightened

the awareness, and have created a clearer process on ongoing safety concerns. "Scary thing about safety is that schools are one of the safest places, but acts of violence are so random." First plan made in 1999. Site used other schools plans as a guideline. The plan is consistent with the basic plan used at several other school districts. Plan is reviewed this year. Practice of lockdown and IOC drills takes place at least two times a year. (Evolving)

59 PR

36

The public school district is located away from a large metropolitan area (rural). The current coed student population is 400, PK-12. The current educational leader has been in this position for 6+ years. Open communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Research on safety is ongoing. New building built with safety in mind. School safety survey utilized for input. Open communication with all community first responders. Scheduled meetings take place on a consistent basis. Leader indicates that even though you can take as many precautions as possible, you cannot keep everyone safe at all times. However, when you build safety into your budget and your process, you can make a plan that is effective. First plan made in 2002, and updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Site is a designated Medical Emergency Response

Center. (Evolving+)

60 PR

37

The public school district is located away from a large metropolitan area (rural). The current coed student population is 1,250, PK-12. The current educational leader has been in this position for 2+ years. Safety has a minimal process. All aspects required by law are addressed but are not built into the system. Leader addresses safety as something else to have to focus on rather than academics. Leader uses a reactive approach. Leader is aware of safety issues and incidents at other schools. Leader has done a minimal amount of inquiry concerning safety. Leader has minimal contact with emergency first responders in the community. Leader is just starting to build a network within the community. In the past had a resource officer, but did not continue to fund. Occasionally talks with county law enforcement, but not on a scheduled basis. No one has offered feedback after fire or tornado drills. Leader is aware of the importance of safety and security issues. Understands that time, money, and focus are needed to address the risks, yet seemed unconcerned. Leader indicates that the process is a game of catch-up. Current plan was put together by previous educational leader. Consistent with basic plan used in other districts. Plan was updated in 2006 with minimal changes. Practice of lockdown drill 2-4 times per year. No IOC drill. (Minimal)

61 PR

38

The public school district is located away from a large metropolitan area (rural). The current coed student population is 2,713, PK-12. The current

educational leader has been in this position for 5+ years. Open

communication with all community first responders, school board members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Research on safety is ongoing. Leader has attended several workshops and seminars focused on school safety. Several other employees are interested in safety. Open communication with all community first responders. Scheduled meetings take place on a consistent basis. Used input from meetings to update existing plan. Leader indicates that school safety is a priority. Being proactive will make the process easier to address. Leader indicates that when you build safety into your budget and your process, you can make a plan that is effective. First plan made in 1995, and updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Has a fulltime school resource officer on staff. Applied for and received grants for safety. Uses bond money for safety. Site is a Medical Emergency Response Center. Has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year. (Exemplary)

⁶² PU The public school district is located near a large metropolitan area (urban).

The current coed student population is 13,315, PK-12. The current educational leader has been in this position for 10+ years. Open communication with all community first responders, school board

members, faculty, staff, parents, and students. Encourages research, feedback, and implements other's ideas. Research on safety is ongoing. Leader has attended several workshops and seminars focused on school safety. Several other employees are interested in safety. Open communication with all community first responders. Scheduled meetings take place on a consistent basis. Used input from meetings to update existing plan. Leader indicates that school safety is a priority. Being proactive will make the process easier to address. Leader indicates that when you build safety into your budget and your process, you can make a plan that is effective. First plan made in 1995, and updated every year. All administrators, several teachers, parents, students, and representatives from the community meet each year to revise plan. Ongoing research concerning safety by all those involved in the process. Has a fulltime school resource officer on staff. Applied for and received grants for safety. Uses bond money for safety. Has continually updated sites and new buildings are built with safety in mind. Has a staff and faculty training program. Practice drills are ongoing with several held throughout the year. (Exemplary)

APPENDIX G

Additional Supportive Quotes

"My commitment to school safety comes from my experience at other schools. I have a clear understanding that a safe school is the most important aspect."

"Our school board is on board about school safety and training. They give "Top Priority" to safety."

"Parents feel good that there is a plan."

"We have a solid plan, and as long as everyone knows the expectations, they can think through the situation."

"We have to be open to others' ideas."

"We have been proactive and try to hire others who are."

"When I first came here, there was no safety plan. I knew I had to get started and make it a priority. We have phased in changes to each site over the last four years, but we still have a lot more to do."

"The growth in our community causes us to continually focus on safety. By making it a priority, we continuously meet and make changes. As we add new buildings, we are conscious of safety and build it into the designs."

"After Hurricane Katrina, we had to rethink our school on business terms. We now understand the devastation to students' and adults' lives. We added a command and control center on our campus to help with any disaster in this area."

APPENDIX G (continued)

"We have a variety of speakers come in each year to address different aspects of safety. This approach keeps safety on the front lines at all times."

"When we hire new people, we always ask about their background in safety and security at schools. We are beginning to find more and more people who have a history of safety experience and are willing to help us keep safety as a priority."

"We make a contract with local emergency personnel, and this strengthened our plan."

"When we realized how important school safety was, we developed a strong network."

"Not only do we have a good relationship with emergency first responders, we have to have a good relationship with the media."

"Our Resource Officer is here even for the before and after school programs, as well as all extra-curricular activities."

"My accountability is important to the school's safety."

"It just took one incident that happened at our school that changed everyone's perception of risks. Now I really put a lot of effort into the planning process."

"As soon as I started this position, I formed a local group and we started the process. Being proactive is the best way to prevent, or deal with any risk."

"If our parents know we have the best plan possible, they will trust the system, and trust me as well."

APPENDIX G (continued)

"Focusing on safety is just not that hard anymore, it is just what I do because it is a priority for me."

"I have a minor in safety, so it will always be a priority for me."

"I know that safety is an ongoing process, and the more important I make it, the better our plan will be."

"Every type of risk we can think of is addressed in the system."

"I know that I have to continue to promote good policy and procedures and practice the procedures, so people will perform well in a real emergency."

"I understand that safety needs to be of utmost concern and needs to be addressed regularly. Based on the latest information, I am changing our policy to improve the safety of our students, faculty, staff, and administrators."

"Safety is always on my mind, so I have to be proactive."