K-12 SCHOOL LEADERS AND SCHOOL CRISIS: AN EXPLORATION OF PRINCIPALS' SCHOOL CRISIS COMPETENCIES AND PREPAREDNESS

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On any given day, principals could find themselves faced with a situation that could define their roles as crisis leaders. This dissertation research offers an exploratory study in the field of crisis response and educational leadership. From experts in the field of crisis response, the author compiled a list of crisis management competencies specifically for school leaders and then assessed principals' and assistant principals' crisis leadership preparation and perceived familiarity with the competencies.

Initially, the researcher contacted forty superintendents from The Western Pennsylvania Forum for School Superintendents and sixty-two superintendents from the Tri-State Area School Study Council to request permission to survey principals and assistant principals in their districts. One hundred ninety-two principals and assistant principals were identified and received email invitations requesting their participation in a brief survey. Of the 192 building administrators contacted, 82 responded to the survey. Two cases were excluded as incomplete, because the respondents completed fewer than half of the survey questions. Of the 80 included participants, 30 worked at the elementary school level, 18 at middle or junior high schools, and 28 at high schools ($n = 76$ reported). Sixty-three had completed a master's degree and 12 had completed a

doctoral degree ($n = 75$ reported). Respondents had worked as building level administrators for an average of 8.53 years.

The overall results of this exploratory study indicated that building level administrators appear to have varying levels of familiarity with limited formal training in the area of crisis leadership.   Further research utilizing the crisis competencies and survey measurement tool developed in this initial research study could provide valuable knowledge and support for the future professional preparation of educational leaders.

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PREFACE

This work is dedicated to my children, Julia, Aidan and Grace. I thank God every night for the life I have with your mother and all three of you. Through your eyes, this topic may or may not have significance, but what this accomplishment stands for hopefully provides a life lesson. Hard work and dedication will provide you the opportunity to truly be proud of an achievement. My resolve to complete such an undertaking can be traced back to the stable loving environment my parents worked so hard to provide.

I would be remiss if I did not give a heartfelt thanks to a few people who provided support throughout this process. First, I would like to thank Laurie Cohen. Her expertise along with her quick wit and sense of humor helped me learn how to wade through the sea of research to finally procure the most difficult sources. Chris Scanlon found a way to tame the king of quotes, guide me in art of APA and most importantly helped me find my voice. Jason Colditz's statistical knowledge was a critical element in helping me interpret vast amounts of data into logical observations. I can't thank you enough for engaging me into a world I have ignored for so long.

I had considerable moral support from the work front that helped me maintain some sense of sanity. I have been very fortunate in my life to find myself surrounded by people I truly respect as educators. Tracy, Matt, Andrea, Curt and Lou your advice and moral support kept me grounded and helped me persevere.

I was honored to have such prolific educators agree to be members of my dissertation committee. The expertise of Dr. Longo provided a leadership perspective that delivered true meaning to this work.   Dr. Vander Ven's vast knowledge of competency training added another dimension to open opportunities for future possibilities with this research. I was fortunate to work with Dr. Trovato in the beginning stages of my graduate work and it was fitting to have her be a part of my final product. She has always proven to be a wonderful resource to me throughout these years. I would also like to thank Joe Werlinich who unfortunately could not sit in on my final defense; however, provided great feedback throughout the process.   This dissertation truly is a reflection of great advice and support from all of you.

I am very proud of this work and it would not have been the level of quality without my advisor, Mary Margaret Kerr. Her relentless desire for perfection forced me to reflect, modify, change and learn new skills which are reflected in this effort. I always knew you were in my corner and one of my biggest advocates.   For your vision and guidance, I thank you.

I need to thank my dear wife, Angela. Angie, marrying you is still and will always be the greatest decision of my life. Words cannot convey what you mean to me. The unconditional support you have given me through this process has always made me feel like I was never alone. This new title is an accomplishment I am very proud of, but will never surpass the pride I have being your husband and father of our children.

INTRODUCTION

It is 7:02 AM on a Thursday morning. Mr. Fitzpatrick, a principal, is meeting with an unexpected parent in his office when a knock on the door sounds. He looks through the slim window on the door sees Ms. Weimer, a guidance counselor with a worried face. He excuses himself from the meeting and Ms. Weimer pulls him into an adjacent office. She begins to describe a phone call with a parent who states her son's best friend and classmate was found dead in his bedroom this morning. As Mr. Fitzpatrick's stress begins to mount, thousands of thoughts plunge into his head. The reality of this moment becomes apparent, the actions and decisions that follow will have profound impact on the immediate and long-term future of the school and all of people associated with this tragic event. This situation will quickly become one of the most difficult experiences the school leader will face in his career.

This scenario and other crises can occur without warning at any time to any school leader. Many variables can influence the events following a crisis. This literature review will examine: 1) the current literature surrounding crisis, 2) how the United States Government responds to crisis, and 3) the implications for school leaders.

1.0   LITERATURE REVIEW

1.1   WHAT IS CRISIS?

"Today's crisis is not a discrete event, but a process unfolding as manifold forces interact in

unforeseen and disturbing ways" (Rosenthal, Boin, & Comfort, 2001, p.6).   As can be seen in

the 2011 media coverage of the earthquake in Japan, a single event can create a multitude of

perilous situations occurring simultaneously.   The damage to buildings and structures resulting

from the earthquake is only one component of a larger sequence of events including tsunamis,

flooding and radiation leaks from nuclear power plants.   Because every crisis has unique

elements and characteristics, it is not surprising that the literature presents numerous definitions

of crisis. Table 1 shows definitions frequently cited in crisis research.

Table 1

Definitions of Crisis

Definitions	Source
"Crises are characterized by low probability/high consequence events that threaten the most fundamental goals of an organization."	Weick (1988, p. 305)
"Typically a crisis forms as a sequence of events that seems, over time, to gather volume and complexity with increasing speed. Its dynamic therefore resembles that of a chaotic system as it iterates through increasingly complex phases toward a disordered state."	Murphy (1996, p. 105)

"A crisis is a threat that reflects the possibility to do reputational (image) damage to an organization."	Coombs and Holladay (1996, p. 280)
"The essence of crisis is found in the deep uncertainty that comes with a forced departure from the known past to one of the many possible alternative futures."	Rosenthal, Boin, and Comfort, et al. (2001, p. 20)
"Today's crisis is not a discreet event, but a process unfolding as manifold forces interact in unforeseen and disturbing ways."	Rosenthal, Boin, and Comfort, (2001, p. 6)
"A crisis is a situation where schools could be faced with inadequate information, not enough time, and insufficient resources, but in which leaders must make one or many crucial decisions.	U.S. Department of Education, (2007, p.1-5)

Given the various interpretations on crisis, it is not surprising that terms such as *emergency, disaster* and *catastrophe* also have fluctuating definitions. For the purpose of this literature review, the term *emergency* refers to "a serious yet fairly routine event: it is a complex and urgent problem, but emergency services are usually trained to deal with event;" the term *disaster* refers to "crisis with a bad ending" (Boin, 2010, p. 130). The term *catastrophe* refers to the breakdown of life-sustaining functions over time with extreme damage in terms of lives lost and finances (Boin, 2010, p. 130). When considering emergencies, disasters, catastrophes, and crisis, the literature supports crisis as the overarching framework of the other three concepts.

Although each definition of crisis is somewhat different, one will note that each highlights the concept that a *crisis promulgates change in the existing organization or community*. In 2009, Mary Margaret Kerr created a definition *specific to the education system.* Accordingly, for the purpose of this research, a school-related crisis will be defined as *"a temporary event or condition that affects a school, causing individuals to experience fear, helplessness, shock, and/or horror. A school crisis requires extraordinary actions to restore a*

sense of psychological and physical security. The origin of the crisis need not be school-based; outside incidents and conditions also can create a crisis for a school" (Kerr, 2009, p. 1). A crisis can be caused by a temporary event such as a student death or an ongoing issue such as the aftermath of a hurricane or flood. In a crisis, a wide range of individuals can be affected at various levels. Fear, helplessness, shock, and/or horror are identified as elements of possible individual reactions to a traumatic event (DSM IV, 2000). When a crisis situation presents itself, decisions must be made beyond the scope of a typical workday. These extraordinary decisions with supporting actions are necessary to bring a sense of normalcy back to the school and children. Finally, a crisis will often occur outside of the school and have a tremendous impact on the school community.

1.1.1   Challenges to Decision Making During a Crisis

In this section, we outline the major challenges of any crisis: a) inadequate preparation of responders, b) psychological impact and c) exigent-decision making.

1.1.1.1 Inadequate Preparation of Responders

Moreover, depending on the crisis location, circumstances, or an individual's role in an organization, he or she may need to serve as crisis *manager*, taking charge of the crisis and making key decisions in a timely manner. For example, a tour guide in a museum could find herself trapped in wing of a museum with a group of visitors as an explosion occurs in another location. Looked upon as the "leader" with expectations from the group to provide a safe retreat, the guide must act decisively. Whereas rank and organization role typically dictate expectations in the daily routine, Rosenthal, Boin, and Comfort (2001) stress that during a crisis, "time

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pressure may be so high that notions of management and rational decision making become meaningless and must accede to situational dominance and instinctive or routinized responses" (p. 7). Returning to the example above, the tour guide may know emergency exit locations; however, a possible injury to a group member may inhibit an expedient escape. The tour guide, low on her travel agency's organization chart, now is charged with a complex leadership responsibility.

1.1.1.2 Psychological Impact

Every crisis has an impact on people. Moreover, individuals respond differently to the in-the-moment crisis environment, depending on their personalities, emotions, history, and ability to handle stress. For example, Rosenthal et al. (2001) explain that the uncertainty and stress of a crisis environment may cause "sudden ignorance and a devastating loss of orientation, or it may lead to acquiescence and discomfort" (p. 7). Returning to our earlier example, the tour guide might panic and leave the injured tourist behind or even find herself unable to find the exit in a museum where she has worked for years.

How the characteristics manifest throughout a crisis depends on the situational events presented. In a crisis situation, any individual can be catapulted into a leadership role without training or expertise. The decisions made surrounding the events of a crisis will ultimately affect the eventual outcome.

1.1.1.3 Exigent Decision-making

The origin of a crisis can range from an act of nature to an individual's single poor decision. One of the most challenging aspects of crisis involves the uncertainty of events that result in exigent decision-making (Rosenthal et al., 2001). In fact, some crisis situations involve making

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crucial assessments and actions within a few hours, minutes, or even a split second, which may include decisions regarding life and death (Rosenthal et al., 2001, p. 7). This need for expedited decision-making further contributes to the personal stress of a crisis environment. Paradoxically, however, certain circumstances require responders to *resist* the impulse to make quick decisions; in these cases, quick decisions could exacerbate the crisis. Once again, we return to the museum example. At once, the tour guide must make multiple fast decisions to secure the safety of her group, including the injured member. How well she executes these decisions will depend on her prior experience, emotional regulation, and her capacity to weigh alternatives. A decision made too quickly could cause more harm to the entire group by prematurely leading people into a dangerous exit strategy. Conversely, the tour guide may panic and wait for a decision from an external source thus holding the elderly tourists in an unsafe environment.

The challenges to an individual facing a crisis can be daunting on several levels. Negotiating the psychological and exigent decision factors in a crisis will often fall upon an unsuspecting person without proper preparation. Compounding many crises is the rapid dissemination of information made possible by current technology.

1.1.2   Technological and Media Factors in Crises

The growth and complexity of technology including social networking and increased media coverage of crisis events has forever altered the course how we respond to crisis. The speed in which information can be retrieved and communicated has increased exponentially in recent years. The creation of information management devices along with the immediate transmission capabilities has influenced public perception of events. These forms of technology have also

created complex systems susceptible to breakdown. The growth in these areas has the potential to influence the evolution of how crisis response is interpreted.

1.1.2.1 Technological Advancements in Communication

As technology continues to evolve, crisis responses will be impacted. Due to the amount and speed of information currently transmitted via media devices (i.e., cell phones, wireless laptops, etc.), access to this technology provides crisis responders with near immediate information. Referring back to the tour guide example, the tour guide may have a cell phone that could alert emergency personnel to their location. Conversely, one of the adolescent tourists could be texting friends to come to their aid without making the tour guide privy to the possibility of additional people placing themselves at risk and adding to the tour guide's responsibility. Each of the actions could affect the outcome of providing a safe outcome for the tourists and has the potential to add to the complexity of the crisis.

1.1.2.2 Complexity of Technology

Technologies control many of the systems in the modern world, such as security, financial institutions and hospitals. These technological systems have contributed to tremendous advancements in efficiency and safety throughout the world. Nevertheless, the use of technology creates the possibility of new dangers. A critical breakdown of the functions served by modern technology presents the opportunity for collapse and failure of multiple systems. Boin (2010) reinforces this idea by defining it as a vulnerability paradox, stating that "modern societies have become increasingly dependent on critical infrastructures that are likely to fail when we need them most" (p. 132). A nuclear power plant damaged by an earthquake creates an immediate need to contain radiation emulsion into the atmosphere. If the safety technology fails, the

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employees may be powerless to contain the radiation. In addition, if the individuals trained to operate the technology controls are killed then other employees will have to assume control. The complexity of the technology may overwhelm the new users and exacerbate the situation (Rosenthal et al., 2001).

As the complexity of technology continues to evolve, it is difficult to predict how these advancements will affect crises. From causing to preventing a potential crisis, technology will forever influence the world. Society will continue to learn from these situations.

1.1.2.3 Media Coverage

One of the most dominant trends involving crisis is the increase of media coverage of events. World news channels and network news providers can disseminate large amounts of information in multiple forms. In addition, a plethora of social networking sites including Twitter^{TM} and Facebook^{TM} provide a growing user base the ability to release and access information within seconds. The tremendous influx of information available, undoubtedly changes the public perception of events.

As crises pique the interest of society, reporters scramble to gain the most up to date information surrounding events. This information can be valuable to responders by providing details and delivering essential information to expedite decision-making. In turn, a person acting as crisis leader is hit with more questions and feels an increased accountability for providing information. With the immediate access of this information through multiple mediums responders are gaining an advantage by accruing information from experts some of which are identified through media contacts.

The spewing of information to the public during an incident has both negative and positive implications. Too often in the media, crises are often approached as a single event or

situation; however, researchers describe crisis as a condition and should be studied as a process (Rosenthal et al., 2001). Viewing crisis as an isolated incident can result in a sensationalist representation of the event. Furthermore, the media attention can create a sense of uneasiness when the focus of the report consists of elevated emotions, such as panic and stress (Rosenthal et al., 2001). Publicizing an event from a single perspective creates the possibility of omitting context of the surrounding situation. However, extensive media coverage of an event has provided public support and sentiment for a dire situation resulting in volunteer efforts. For example, in 2008, *USA Today* reported more than one million volunteers ventured to the gulf coast to support the efforts to rebuild after the destruction by Hurricane Katrina (Davies, 2008). In fact, with the media playing an increasingly invasive role in providing massive amounts of information for public consumption, Rosenthal states, "mediazation will be one of the driving forces in the world of future disasters and crises" (Rosenthal et al., 2001, p. 12).

Technological advancement, with the increased capabilities of the media to influence the public, continues to affect crisis situations. These impacts can be seen throughout time and will continue to evolve as new technological advancements occur. In a similar fashion, crises in education have occurred over the years and as new tumultuous events occur, the educational landscape will continue to change.

1.1.3 Crisis in Educational Settings

Throughout history, one notion is certain: a crisis can occur at any time and any location. Educational institutions ranging from daycare programs, public and private K-12 schools to universities can be exposed to crises that can cause tragic consequences to children. The

following section outlines high profile crises that have influenced the educational landscape in the United States.

When children become involved, the stakes immediately become higher as revealed on July 15, 1976, when a bus load of elementary school children were kidnapped by three masked men. This horrific episode in Chowchilla, California ended 27 hours later, after the children were unloaded into two vans, driven for eleven hours and eventually forced into a buried truck trailer. After spending 16 hours trapped in this underground cell, the children were saved by two of the boys who were able to dig their way out, freeing all of the children (Terr, 1981). This event was one of the first school crises receiving international attention.

Ten years later another high profile event occurred that had a dramatic impact on the United States and the public education system. A teacher at Concord High School named Christa McAuliffe was killed in a space shuttle explosion. This event not only brought national media attention to the National Aeronautics and Space Administration (NASA), but it also drew attention to schools trying to cope with providing assistance on a large scale to students and faculty (Pitcher & Poland, 1992). In 1989, the most violent school-based incident to date occurred in Stockton, California. On January 17, a gunman killed five students and wounded 29 others including a teacher (Pitcher & Poland, 1992). Details reviewed by responders in this incident describe the characteristics of response, recovery of the student body and issues surrounding the lack of professional help for the school and community.

Two subsequent events that drew national attention are necessary to address: The Oklahoma City bombing and the TWA Flight 800 plane crash. Albeit not school events, both of these events had dire consequences that affected society and educational communities. Beyond the large death toll of innocent victims, the Oklahoma City Bombing occurred in the federal

building that housed a daycare facility (Fernandez, 2007). TWA Flight 800 was carrying a group of high school students and chaperones from Pennsylvania to a European field trip (Chua-Eon, H. et al. 1996). Each of these events created a tremendous amount of media attention; however, the media coverage was focused mainly on the events and locations of the tragedies. Very few stories addressed the ramifications to the educational institutions.

During the 1990s, as media coverage steadily increased, varying governmental entities became involved. In 1998, the Office for Victims of Crime's (OVC) Community Crisis Response (CCR) organization was instrumental in providing support to the community in the aftermath of the tragic murder of a teacher and four middle school girls by a student gunman in Jonesboro, Arkansas (U.S. Department of Justice, 1998). Other tragedies in 1998 included the murder of an 8th grade science teacher in Edinboro, Pennsylvania. While chaperoning a dance, this teacher was shot by an eighth grade male student (Daniels et al., 2007). A month later, a fifteen year-old student brought a semi-automatic to Thurston High School in Springfield, Oregon, opened fire, killed two students, and wounded 25 others (Stein, 2006). Within the same year, The National Threat Assessment Center was established by the U.S. Secret Service (Fein & Vossekuil, 1998). This organization was directed to gain knowledge to prevent and identify sources of violence. From this initiative the *Protective Intelligence & Threat Assessment Investigations: A Guide for State and Local law Enforcement Officials* was released to state and local law enforcement officials to provide insight for threat assessment investigations (Fein & Vossekuil, 1998).

The 1999 Columbine High School tragedy created the greatest national attention to school safety and crisis planning. The media frenzy surrounding the Columbine incident spawned multiple prime time exposés and news articles highlighting the dangers schools face in

this country. The Columbine incident forced the American public to realize that educational systems are as vulnerable to crisis as any other organizational structure. While events such as school shootings or bomb threats are indeed tragic, these form the building blocks for establishing policy and protocol for handling crises in educational settings. In fact, Gainey (2009) asserts that the Columbine incident "significantly recast the role of crisis management in educational settings" (p. 267).

In the wake of the Columbine shootings, the FBI's National Center for the Analysis of Violent Crime assembled a conference to examine youth who commit crimes of violence, especially focusing on the profile of the "school shooter." The exploration of the school shooter profile resulted in the publication of a resource entitled *The School Shooter: A Threat Assessment Perspective* (O'Toole, 1999). This resource provides assessment guides, preventative strategies, and interventions proactively to handle a potential school shooter, thus eliminating the risk for a tragic event (O'Toole, 1999).

A unique perspective came out of the damage caused by Hurricane Katrina in 2005. Quoted in an article in the Washington Post, Education Secretary Arne Duncan stated Hurricane Katrina was "the best thing that happened to the education system in New Orleans." Mr. Duncan supported his claim with an explanation of how the tragedy forced the community to evaluate the poor performance of the schools and take the necessary steps to provide a "better" education system (Anderson, 2010).   Understandably, crisis is often associated with the idea of tragic events; however, the public relief efforts in support of this decimated area created one of the largest volunteer efforts in this country (Lopez, 2008). This perspective supports the concept in the earlier stated definition that *crisis promulgates change in the existing organization or community*.

On April 16, 2007, a tragic shooting occurred at Virginia Tech considered the largest massacre recorded on a college campus (Stearns, 2008). A senior, Seung Hui Cho, killed 33 people including himself and wounded 17 others. This shooting was covered extensively through the media and many questions were raised once again about the safety of the educational institutions across the country (Davies, 2008).

This brief summary and the timeline that appears in Figure 1 outline some of the higher profile educational related crisis in the United States and provide help for us to understand the factors and events that led to today's view of school crisis prevention, preparation, response, and recovery.

Timeline of Major School-Related Crises

1976 Chowchilla School Bus Kidnapping

1985 Space Shuttle Disaster

1989 Stockton California School Shooting

1995 Oklahoma City Bombing

1996 TWA Flight 800 Plane Crash

1998 Jonesboro, Arkansas School Shooting

1998 Edinboro, Pennsylvania School Shooting

1998 Springfield, Oregon

1999 Columbine High School School Shooting

2005 Hurricane Katrina

2007 Virginia Tech School Shooting

1976 Chowchilla, California = A bus load of elementary school children were kidnapped by three masked men.

1985 Space Shuttle Disaster = A teacher at Concord High School named Christa McAuliffe was killed in a space shuttle explosion.

1989 Stockton, California = A gunman killed five students and wounded 29 others including a teacher.

1995 Oklahoma City Bombing = Explosion occurred in the federal building that housed a daycare facility.

1996 TWA Flight 800 Plane Crash = This plane was carrying a group of high school students and chaperones to a European field trip.

1998 Jonesboro Arkansas School Shooting = A teacher and four middle school girls were killed by a student gunman.

1998 Edinboro, Pennsylvania = An eighth grade male student shot and killed a science teacher at a school dance.

1998 Springfield, Oregon = A fifteen year-old student brought a semi-automatic to Thurston High School, opened fire, killed two students, and wounded 25 others.

1999 Columbine High School Shooting = This shooting created the greatest national attention to school safety and crisis planning.

2005 Hurricane Katrina = This tragedy forced the community to evaluate the poor performance of the schools and take the necessary steps to provide a "better" education system

2007 Virginia Tech School Shooting = A senior killed 33 people including himself and wounded 17 others. This event is considered the largest massacre recorded on a college campus.

Figure 1

1.1.4   Summary

We have investigated the various definitions of terms in the literature associated with crisis. This investigation provided us the ability to focus our attention to crisis as it relates to schools. Utilizing Kerr's (2009) definition, *"a temporary event or condition that affects a school, causing individuals to experience fear, helplessness, shock, and/or horror. A school crisis requires extraordinary actions to restore a sense of psychological and physical security. The origin of the crisis need not be school-based; outside incidents and conditions also can create a crisis for a school"* (p. 1), sets the stage for the foundation of this research. Challenges to decision making, the impact of technology innovation and examining some of the prolific tragic events schools have faced delineates the complexity of this topic. Each crisis has its own unique characteristics and implications for crisis research. Keeping these events in mind, it is important to examine the

broader picture and understand how the United States Government has evolved in the realm of crisis response.

1.2   THE UNITED STATES GOVERNMENT'S RESPONSE TO CRISIS

Addressing crises at a national level involves complex processes, and depending on the situation, many stakeholders and organizations, become involved in various stages of these processes. Throughout history, multiple government officials have attempted crisis response in reaction to varying man-made and natural disasters; however, in response to recent large-scale crisis events, the United States government formalized many crisis-focused organizations, agencies, and processes at the national level (Borja, 2008). The following sections will describe how the U.S. government has organized agencies to address crises, describe the responsibilities of agencies dedicated to addressing disaster situations and pinpoint common competencies utilized to address these situations.

1.2.1   Organizational Structure of Government Agencies Addressing Crises and Disasters

With the United States government divided into three branches (i.e., executive, judicial, and legislative), it is the executive branch that houses the Department of Homeland Security (DHS). Following the 2001 terrorist attacks on the United States, DHS evolved from the proclamation by President George W. Bush to provide protection to the American people against terrorist attacks and to provide preparedness and coordinated response procedures in the case a future event should occur (Borja, 2008).   In a public address to the nation, President George W. Bush

declared his intent was to create a Cabinet-level Department of Homeland Security. This department would bring together the essential agencies protecting the United States (Borja, 2008). President Bush outlined the following proposed divisions in the department:

- Border and Transportation Security,

- Information Analysis and Infrastructure Protection,

- Chemical, Biological, Radiological, and Nuclear Countermeasures, and

- Emergency Preparedness and Response (Borja, 2008).

In order to provide the most comprehensive national security network, Bush charged each of these divisions with specific tasks. Border and Transportation Security had the primary task of controlling the United States land and sea borders in order to prevent terrorists and weapons of mass destruction from entering the country. The terror threat alert system (by which the level of terrorist threat in the United States was designated by a color scale) was a product of the Division of Information Analysis and Infrastructure Protection, whose function was to gather intelligence from multiple agencies to gauge the level of threats against the country. Critical to the success of both Border and Transportation Security and Information Analysis and Infrastructure Protection was the division of Chemical, Biological, Radiological, and Nuclear Countermeasures, which provided a collaborative effort of scientists to develop technologies to detect weapons. The Emergency Preparedness and Response division responsibility is to work with state and local authorities to respond quickly and effectively to emergencies (Borja, 2008). The development of this division will have the largest impact on crisis response and absorb multiple agencies under one umbrella.

The Homeland Security Act of 2002 was signed into law on November 25, 2002 by President George W. Bush (H.R. Res 5005, 2002). Once this act was signed, the president

submitted a reorganization plan the same day, which established January 24, 2003 as the beginning date of operations for the Department of Homeland Security. Bush appointed Tom Ridge as the first Secretary of Homeland Security and was responsible for creating the organization structure of the DHS. Currently, DHS includes the following fifteen major components dedicated to providing consistency on a national level:

- Directorate for National Protection and Programs,

- Directorate for Science and Technology,

- Directorate for Management Office of Policy,

- Office of Health Affairs,

- Office of Intelligence and Analysis,

- Office of Operations Coordination and Planning,

- Federal Law Enforcement Training Center,

- Domestic Nuclear Detection Office,

- Transportation Security Administration (TSA),

- United States Customs and Border Protection (CBP),

- United States Citizenship and Immigration Services,

- United States Immigration and Customs Enforcement,

- United States Coast Guard,

- Federal Emergency Management Agency (FEMA), and

- United States Secret Service ("Department Subcomponents and Agencies," 2011).

The alignment of these key organizations provides the government the opportunity to streamline operations to provide better communication between agencies. Of these organizations, FEMA is intricately involved in the management of crisis at the national levels.

Executive Branch

Legislative Branch

Judicial Branch

Department of Homeland Security (DHS)

The 15 Organizations Reporting to the Department of Homeland Security

Directorate for National Protection and Programs	Directorate for Science and Technology	Directorate for Management Office of Policy	Office of Health Affairs
Office of Intelligence and Analysis	Office of Operations Coordination and Planning	Federal Law Enforcement Training Center	Domestic Nuclear Detection Office

Transportation Security Administration (TSA)	United States Customs and Border Protection (CBP)	United States Citizenship and Immigration Services	Federal Emergency Management Agency (FEMA)
United States Coast Guard	United States Immigration and Customs Enforcement	United States Secret Service ("Department Subcomponents and Agencies," 2011).	

National Response Framework (NRF)

2 Guides Produced by FEMA

National Incident Managment System (NIMS)

5 Key Principles

Engaged Partnership

Tiered Response

Scalable, Flexible and Adaptable Operatoinal Capabilities

Unity of Effort Through Unified Command

Readiness to Act

5 Main Components

Preparedness

Communications and Information Management

Resource Management

Command and Management

Ongoing Managment and Maintenance
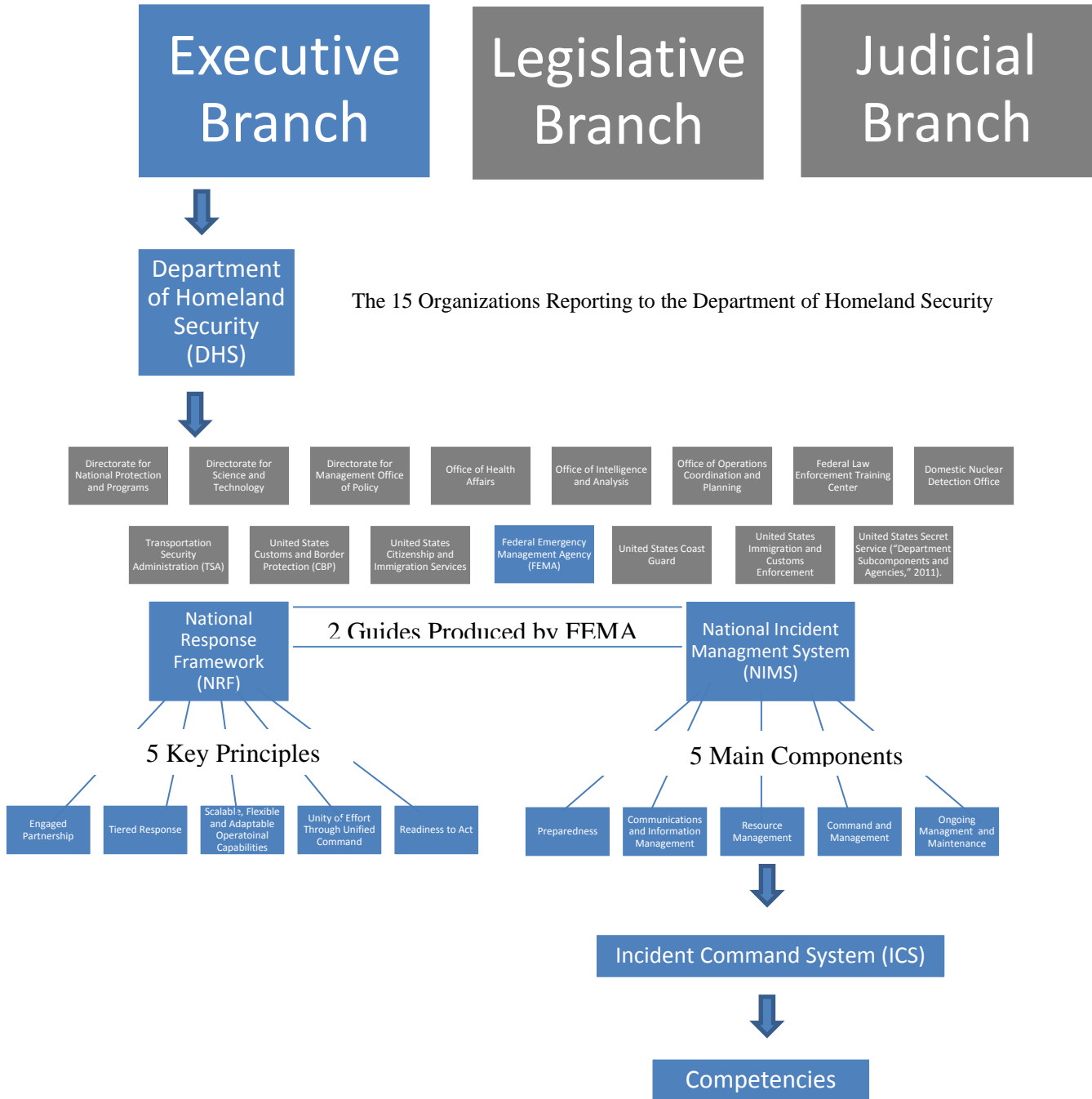
Incident Command System (ICS)

Competencies

Figure 2. Federal Crisis Response Agencies

1.2.2   Federal Emergency Management Agency (FEMA)

FEMA, an organization created to build and support the nation's emergency management system, joined the newly developed DHS on March 1, 2003, and with this merger, DHS benefited from the incorporation of an established organization aimed at addressing crisis (Borja, 2008).   As written in its mission statement, FEMA aims to "support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards" (FEMA, 2008, p. 2). While FEMA has gained more recognition as a federal entity in the past several years, FEMA's roots extend back to as early as 1803.

Following extensive fires in New Hampshire in 1803, elements of the modern-day FEMA first appeared in the Congressional Act that provided assistance to this town (FEMA, 2008). Throughout the following century, national and state governments continued to respond to crises through numerous ad hoc legislation and relief programs, most of which addressed crises resulting from natural disasters (FEMA, 2008).   The idea to formally organize crisis response on a national level emerged in 1979 as the National Governor's Association presented President Jimmy Carter with the challenge of centralizing federal emergency functions.   In response, Carter created an executive order in 1979 to combine multiple disaster-related agencies into a unified agency (FEMA, 2008).   The Federal Insurance Administration, the National Fire Prevention and Control Administration, the National Weather Service Community Preparedness Program, the Federal Preparedness Agency of the General Services Administration and the Federal Disaster Assistance Administration activities from HUD all combined to create the initial framework of FEMA (FEMA, 2008).   In 1979, Carter appointed John Macy as FEMA's first director.   Macy set the foundation for the Integrated Emergency Management System, which

established a comprehensive and proactive approach to crisis that included multi-faceted warning systems and procedural instructions that relate to a myriad of emergencies (FEMA, 2008).

As the years progressed and the challenge of new crises arose, the federal government reacted by frequently reformatting and reorganizing FEMA with each new each emergency or disaster (FEMA, 2008). In 1993, President William Clinton nominated James Witt as the first FEMA director who had experience as a state emergency manager ("FEMA History," 2010). Witt's background provided him the knowledge and experience to reform national disaster relief and recovery operations, emphasizing the importance and detail of preparedness and mitigation programs (FEMA, 2008).   Under Witt's direction and ability to capitalize on the current political environment, FEMA grew by taking advantage of redirected resources from cold war-related programs (FEMA, 2008). As the cold war had just ended, money was reallocated from civil defense and moved in the programs to prepare the country for other crises (FEMA, 2008).

Following the September 11, 2001 terrorist attacks, President George W. Bush appointed Joe M. Allbaugh as director of FEMA, who shifted the organization's attention to issues of national preparedness and homeland security (FEMA, 2008). With terrorism at the forefront of this shift, FEMA's new agenda included training and equipping the nation's crisis responders to deal with weapons of mass destruction. The nation's shock at the 2001 attack combined with the overwhelming uncertainty as to the possible future of national security resulted in billions of dollars of new funding directed to FEMA to help communities face the threat of terrorism.   On March 1, 2003, FEMA became united with the nation's other crisis-response networks under the common governance of the DHS (FEMA, 2008).

Reviewing the history of FEMA, it is evident that FEMA continues to evolve and change over time, due in large part to the response to many different natural and man-made events. In

fact, FEMA recently underwent changes to provide better emergency/disaster response under the Post-Katrina Emergency Reform Act of 2006 (S. Res. 3721, 2006). As FEMA continues to evolve, the focus of the agency remains true. In conjunction with coordinating the federal government's role in preparing for, preventing, mitigating the effects of, responding to, and recovering from all domestic disasters, whether natural or man-made, FEMA produces documents that serve as frameworks for clarifying its guiding principles and competencies. The National Response Framework (NRF) and the National Incident Management System (NIMS) are two documents designed as companion pieces to FEMA's mission to coordinate a national response plan to address disaster situations (U.S. Department of Homeland Security (DHS), 2008b).

1.2.2.1 National Response Framework

"The National Response Framework (NRF) is a guide to how the Nation conducts all-hazards response" (DHS, 2008b, p. 1). From a national perspective, the NRF provides a consistent approach that can address a wide scope of hazards threatening the United States. This document defines the principles, roles, and structures that provide direction for crisis response. Specifically, the National Response Framework describes how communities, tribes, states, the federal government, private sectors, and nongovernmental partners work together to coordinate national response. In addition, the NRF "describes specific authorities and best practices for managing incidents…and builds upon the National Incident Management System (NIMS), which provides a consistent template for managing incidents." (DHS, 2008b, p. 1).

The NRF strives to encompass all facets of emergency response. DHS addresses these principles in the national response doctrine, which includes five key principles: engaged

partnership; tiered response; scalable, flexible and adaptable operational capabilities; unity of effort through unified command; and readiness to act (DHS, 2008b).

The first of these principles, *engaged leadership*, is essential for leaders at all levels of crisis responding and is reflected in NRF's basic premise: crisis response should take into account the immediate situation and the ability of the local entities to respond to this situation, which when combined, determine the extent to which outside aid is required (DHS, 2008b). Most often, incidents occur at the local level, thus causing response efforts to be limited to those of the immediate area. NRF's concept of engaged leadership concedes that establishing partnerships with multiple levels of communities, tribes, governments, private sectors, and nongovernmental partners will provide smooth transitions as additional support becomes necessary during a crisis (DHS, 2008b). With engaged leadership acknowledging various levels of support, NRF's second principle, *tiered response*, explains the management philosophy of adding additional supports when they become necessary (DHS, 2008b). When incidents occur at the local level they will often begin and end without the need of further assistance. A key factor is the ability to determine when other supports are necessary to mitigate the incident. Communication is a critical component of effective crisis response and can improve when these agencies engage in planning, preparing and practicing response activities (DHS, 2008b).

With NRF's first two principles focusing on the players of a crisis, the remaining three principles focus on the interactions between these players. Because all incidents will differ as to the extent and needs of the situation, it is critical when planning and addressing situations responders are able to adapt and change depending upon the event; hence, NRF's third principle addresses *scalable, flexible and adaptable operational capabilities* (DHS, 2008b). In order to meet these needs, the NRF provides structure for agencies to work together to address the

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particular needs of a situation through the Incident Command System (DHS, 2008b). The

Incident Command System also is the *embodiment of unified command*, the NRF's fourth

principle, as it provides general direction of leadership to support a situation, primarily focusing

on coordination between stakeholders (DHS, 2008b). For example, the Department of Defense

collaborates with FEMA in federal response as necessary and adds a military component with

activities surrounding chain of command.

The final NRF principle addresses *readiness to act* (DHS, 2008b). Dealing with

incidents that constitute a crisis will often force quick decisions to reduce the risk to people and

property. Readiness to act involves much planning, preparation and practice, emphasizing that

knowing the processes and supports are a necessary step in providing much needed support.

With the NRF serving as a guide for all hazards response, and with the commitment of crisis

response agencies, can reduce confusion and increase response rates during crises (DHS, 2008b).

1.2.2.2 National Incident Management System

As a companion document to the NRF, the National Incident Management System (NIMS)

clarifies and addresses multiple issues associated with responding to crises:

> "The National Incident Management System (NIMS) provides a systematic, proactive
>
> approach to guide departments and agencies at all levels of government,
>
> nongovernmental organizations, and the private sector to work seamlessly to prevent,
>
> protect against, respond to, recover from, and mitigate the effects of incidents, regardless
>
> of cause, size, location, or complexity, in order to reduce the loss of life and property and
>
> harm to the environment." (U.S. Department of Homeland Security (DHS), 2008a, p.1)

While the NRF addresses national policy, NIMS focuses on the management of incidents by providing a standardized system of details and procedures to utilize during a situation (DHS, 2008a).

The key behind NIMS lies in the standardization of crisis response frameworks organized in a flexible and adaptable format that establishes a common language of the basic structures of managing crises (DHS, 2008a). NIMS enables responders to work together to provide the best means to deal with incidents not only through its clear blueprint of crisis management procedures, but also through providing the basis for training and overall preparedness aptitudes (DHS, 2008a). NIMS is divided into five main components: preparedness; communications and information management; resource management; command and management; and ongoing management and maintenance (DHS, 2008a).

Preparedness. The first core component of NIMS addresses the importance of engaging crisis responders in frequent preparedness exercises and activities in the absence of a crisis situation to ensure competency of policy and procedure (DHS, 2008a). "Preparedness involves an integrated combination of assessment; planning; procedures and protocols; training and exercises; personnel qualifications, licensure, and certification; equipment certification; and evaluation and revision" (DHS, 2008a, p.7). While attempting to train for a potential unpredictable emergency may seem like a daunting task, NIMS asserts that preparedness exercises are necessary to align organizations and protect United States citizens (DHS, 2008a). NIMS identifies 15 scenarios to provide examples of emergencies to provide less uncertainty in planning (DHS, 2008a). Additionally, NIMS calls for frequent drills in order to keep proper policy and procedure fresh in the minds of crisis responders, while also accounting for integration and practice for new authorities or crisis team members (DHS, 2008a).

While preparedness should be a unified approach from all levels (i.e. local, state, and federal), a main focus of NIMS emphasizes the importance of addressing crisis management at the local level (DHS, 2008a). Whereas NRF lays out numerous resources that provide crisis aid, the reality of a crisis is a proximity phenomenon – those who are closest respond first. The implications of this reality is local resources are often the first to approach and manage the situation, whether or not they be the best equipped. It is only after this first, local response occurs that the need for outside agencies or supports can be determined. The elements of NIMS lay out a process in order to provide fluidity and timeliness to the provision of additional support to local entities in the case of a crisis (DHS, 2008a).

In order to create the smooth transition and provision of crisis resources, NIMS calls for the organization of preparedness groups that "provide coordination for emergency management and incident response activities before an incident or planned event" (DHS, 2008a, p. 13). These groups can vary in size and focus on large-scale groups or individual organizations. Regardless of size, preparedness organizations create the time for individuals to meet, discuss, and plan proactive measures to divert and mitigate impending disasters (DHS, 2008a).

NIMS outlines a plethora of actions a preparedness organization may take. For example, an organization may place priority on establishing and coordinating emergency operations with the inclusion of pubic communications (DHS, 2008a). A preparedness organization may also choose to emphasize identifying resources that may become valuable in a crisis scenario (DHS, 2008a). As outside agencies are frequently necessary during a crisis, the proactive identification of these resources can save time with predetermined guidelines in regards to use and prioritization (DHS, 2008a). Furthermore, responder safety is a major consideration promoting training and evaluation of action programs, the consideration of which is integral to crisis team

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planning, practice, and revision (DHS, 2008a). As these are only some of the actions a

preparedness organization may take, NIMS recommends determining the needs of a specific

preparedness organization through after-action reviews or either drills or actual crises to provide

guidance for future situations (DHS, 2008a).   The level of preparedness of any given

organization is apparent through the quality of the communications and operational management

of information.

      Communications and Information Management.   "Emergency management and

incident response activities rely on communications and information systems that provide a

common operating picture to all command and coordination sites" (DHS, 2008a, p. 7).

Considering the importance of accurate and efficient communication during a crisis, NIMS

provides a framework for communications through the identification key concepts, organization

of management, and provision of a clear operating procedure (DHS, 2008a).

      With quick decisions dominating the management of a crisis scene, it is paramount that

all parties both on and offsite have correct and timely data.   In order to ensure proper

communication and coordination between crisis response entities, NIMS defined a common

operating picture for communication in a crisis that is characterized by interoperability,

reliability, scalability, portability, and the resiliency and redundancy of communications and

information systems (DHS, 2008a). *Interoperability* focuses on the smooth and accurate

exchange of information between agencies via various mediums, procedures, and processes,

which should be clearly documented in agreements or standard operating procedures that are

practiced frequently (DHS, 2008a). Within the interoperable systems, communication must be

reliable, scalable, and *portable* in order to have a system that is ready when needed (DHS,

2008a). Specifically, equipment intended for crisis response should be checked frequently for

reliability, should be available for use by a number of the crisis response team at the same time, and should be portable enough to use in more than one location (DHS, 2008a). Although seemingly obvious, the equipment should be *resilient* enough to withstand various weather and handling elements is extremely important, and there should be a *redundancy* of equipment (i.e., more than one mode of communication) in the case of a malfunction or receptions issues (DHS, 2008a).

Another focus of the communications and information management section of NIMS defines management characteristics, stating that the types of communication need to be consistent and clearly defined for all parties involved (DHS, 2008a). NIMS outlines a list of four standardized communication types: strategic communications, tactical communications, support communications, and public address communications (DHS, 2008a). *Strategic communications* describe the communiqué of the decisions, roles and responsibilities and actions, which ultimately determine the direction of the overall plan of action (DHS, 2008a). The strategic communications must effectively be delivered between the command and supporting agencies through *tactical communications* (DHS, 2008a). Whereas the communication between the command and supporting agencies composes the majority of planning and action during a crisis, *support communications*, or direct communications between the supporting agencies, may be necessary to coordinate services (DHS, 2008a). These support communications could come in the form of hospitals providing resources to other hospitals or local law enforcement acquiring additional resources (DHS, 2008a). Finally, communication between the command, supporting agencies, and the general public happens through *public address communications*, often taking the form of press conferences and emergency alerts (DHS, 2008a).

In addition to the definition of key concepts and communication types, NIMS dictates that policy and planning must incorporate what communication systems could and should be used during a crisis (DHS, 2008a). The organization and operations in communication procedures primarily focus on the forms of information and data that affect situations. Because policy and planning involves multiple agencies, agreements need to be made to ensure all parties will follow prepared protocols. Although NIMS primarily focuses on communication through common language, the possibility of encrypted language and other forms of security are also addressed (DHS, 2008a).

Resource Management. The fluid and adaptable flow of resources (e.g., personnel, equipment, or supplies) is needed to support critical incident objectives. NIMS establishes a resource management process comprised of planning, use of agreements, categorizing, identifying and effective management of resources (DHS, 2008a). Resource management is predicated on the following underlying concepts: consistency, standardization, coordination, use, information management and credentialing (DHS, 2008a). Through providing a standard method for using resources, NIMS creates the means for consistently identifying, acquiring, allocating and tracking resources (DHS, 2008a). In addition to having a standard method of use for these resources, NIMS places emphasis on classifying resources in order to provide the necessary standardization of mutual aid or assistance agreements (DHS, 2008a). Coordination describes the benefit of facilitating and integrating the resources, and the extent to which these resources are incorporated underlies NIMS's concept of "use" (DHS, 2008a). To aid in the crisis response, other resources may be acquired from the private sector or nongovernment organizations creating the need for management planning efforts. Information management is integration of all of the communications from each stakeholder. Although seemingly obvious,

careful time and planning are necessary to become prepared to acquire resources in a timely fashion. Creating common criteria for training and certification is the final piece of credentialing phase.

      Command and Management. All of the NIMS components addressed thus far support the actions and decisions made by the individuals who comprise the Incident Command System (ICS) (DHS, 2008a). In order to establish ICS, NIMS developed a system "designed to enable effective and efficient incident management and coordination by providing a flexible, standardized incident management structure" (DHS, 2008a, p.8). As ICS members are often the most visible group of people during a crisis, the cohesion and structure of this group is critical. The ICS focuses on coordination and integration of various resources necessary to address any particular crisis, including elements such as "facilities, equipment, personnel, procedures, and communications" (DHS, 2008a, p.8). This coordination can extend across jurisdictions and agencies with the common goal of supporting the needs of the ICS team in upholding NIMS standards of planning and managing resources (DHS, 2008a).

      Because first responders are most likely to be from a smaller, local entity, NIMS designed the ICS as a flexible system that can be scaled to the particular type and scope of an incident (DHS, 2008a). In the event that an incident cannot be handled locally, multiagency coordination becomes an integral part of the command management structure, hence allowing the facilitation of communication and collaboration between government and non-government agencies and organizations, as well as stakeholders (DHS, 2008a). With the ICS providing a clear framework for understanding roles and preparedness agreements establishing linkages between agencies, all parties engage in working together to effectively execute a crisis response plan (DHS, 2008a). Another key element of the ICS coincides with the NIMS communication

guidelines, as the ICS must decide what levels of information should be released to the public (DHS, 2008a). The ICS relies on public information officers and joint information centers to provide clear, concise information to the public (DHS, 2008a).

Ongoing Management and Maintenance. Crisis response is an evolving field, and with each crisis providing an opportunity for reflective evaluation of response and management procedures, FEMA incorporates the necessary components of ongoing management and maintenance into NIMS (DHS, 2008a). In fact, the integration of monitoring procedures is directed by the DHS, as the *Homeland Security Presidential Directive 5: Management of Domestic Incidents* calls for "a mechanism for ensuring the ongoing management and maintenance of NIMS, including regular consultation with other Federal departments and agencies; State, tribal, and local stakeholders; and NGOs and the private sector" (DHS, 2008, p.8). In order to address this directive, FEMA developed the National Integration Center (NIC) to act as a review board for NIMS implementation and growth by providing guidance and resources to all components of the NIMS framework (DHS, 2008a). As technologies in all aspects of response evolve, the NIC works with the DHS's Technology Directorate to investigate and research to provide guidance in improving technology for response activities (DHS, 2008a). With NIMS integrating elements of preparedness, communications and information management, resource management, command management, and ongoing management and maintenance as the guiding principles of crisis response, it became clear that the specificities for ICS positions needed defined by *core competencies* before NIMS policies and procedures could be fully implemented (DHS, 2008a).

1.2.2.3 Competencies

Competency development is a term embodied in the field of human resource management. The work of Fine and Cronshaw (1999) explores functional job analysis and describes the specific skills necessary to "master the requirements and standards of particular crafts and/or areas of knowledge" (p. iii). These specific skills are linked to situations or circumstances providing direction for *how to* address a problem or issue. For the purposes of this research, we will define competencies as *the fundamental, knowledge, ability, or expertise in a specific subject area or skill set*.

1.2.2.4 Competency Development

Through the lens of job and work analysis, competencies are the essential skills and knowledge utilized to perform a job (Brannick et al., 2007). In the field of human resource management, this approach is important in providing a common understanding of the specific skills necessary to accomplish a task. This construct can transcend many fields and be utilized by organizations ranging from federal government agencies to small businesses. Competencies are created by analyzing a job or task to determine the skills, behaviors or knowledge necessary to accomplish an objective. Once these competencies are created they can utilized in training individuals for the purpose of being a productive member of an organization. To take this one step further, through the lens of crisis management, a crisis leader can utilize a set of competencies to respond to a crisis situation.

1.2.2.5 Competencies for Crisis Management

The National Integration Center (NIC) began developing *crisis* competencies in February of 2005, and under the primary leadership of the U.S. Fire Administration (USFA), competencies

were developed in order to provide guidance and support to individuals working in the ICS (DHS, 2008a). As the USFA progressed in the development of ICS competencies, the National Wildfire Coordinating Group collaborated by adding the final changes on the ICS competencies, which were announced and released to the public by FEMA in April 2007 (DHS, 2008a). That same spring, expert groups reviewed and revised the competencies, which were then accepted by the Competency Change Management Board. The ICS competencies provide a minimum set of standards that is applicable for any agency to utilize in emergency management (DHS, 2008a).

1.2.3   Summary

Understanding the United States Government's response to crisis is critical when one considers that the emergency responders with whom school leaders invariably will work. After all, those emergency responders have been trained under the purview of the recommendations from FEMA and Department of Homeland Security. The complexities of crisis response at the national level have evolved over time and as a result of changes in leadership, historic events and organizational changes in the executive branch.

The creation of the Department of Homeland Security was intended to provide an organizational system to agencies designed to protect the United States from threats. The Federal Emergency Management Agency's (FEMA) primary focus is to build and support the nation's emergency management system. FEMA carries out this charge through the two primary documents; the National Response Framework and the National Incident Management System. The framework described in these companion documents offers us an initial array of competencies for those who must address crises in school settings.

1.3 IMPLICATIONS FOR SCHOOL LEADERS

Recall the opening case study example involving Ms. Weimer, Mr. Fitzpatrick, and the impending school crisis situation. As Ms. Weimer describes the phone call to Mr. Fitzpatrick, his mind is already racing with questions: "What should I do next? What training have I had? Who do I call? Who can help?" Before Mr. Fitzpatrick or any other school official can respond to a crisis, these basic questions must be answered in order to dictate the direction of crisis response. A leader's ability to respond to crisis greatly relies on his or her confidence and ability to answer these questions in a timely manner. In fact, Gainey (2009) states that "only when school district personnel are confident of their ability to lead in both good times and adversity can the district fully undertake its mission of education in a safe and responsive environment" (p. 268).

Further support for the need for school crisis preparedness of educational leaders was evident in the 2009 congressional testimony provided by Kenneth Trump, the President and CEO of National School Safety and Security Services, Incorporated. Trump presented testimony to Congress in regards to school safety issues, in which he supported comprehensive professional development programs for administrators and educational leaders, especially for key elements such as student discipline, behavior management, violence prevention, school safety, security and crisis preparedness (Strengthening School Safety, 2009).

To provide a review of other literature on crisis preparedness of K-12 educational leaders, this author conducted an extensive search for one year. The following section outlines the search, providing an explanation for the limited number of sources in this area.

Beginning with a search for common *competencies* in dealing with crisis situations, the search focused in on two main categories; business and education. With the assistance of the

Hillman Library's reference librarian, five search engines were explored in each category, yielding limited results pertaining to the preparation of school leaders:

1. BUSINESS:

    a. Academic

    b. Business Source Premier

    c. Human Resource Abstracts

    d. Human Resource Library

    e. MCB Press Emerald Library

2. EDUCATION

    a. Academic

    b. ERIC

    c. Proquest Dissertation and Thesis

    d. Psycinfo

    e. Sociological Abstracts.

The Proquest Dissertations and Thesis search identified two graduate dissertations that provided preliminary areas of focus and additional authors in the field. The basis for this literature review was the ERIC search of peer-reviewed articles utilizing the following subject descriptors: *school crisis, school leadership, principals dealing with crisis, school leaders dealing with crisis, crisis response, crisis prevention and crisis intervention*. School crisis books and manuals were reviewed for specific chapters pertaining to educational leadership preparation and to identify other authors in the field. Additional searches through the course of the year utilizing *school safety* and *school violence* produced information related to the general topic of school crisis response. However, the particular focus of this literature review is on the roles, responsibilities,

and preparation of school leaders for crises affecting a school or school district. Unfortunately, little has been written about this subtopic of educational leadership in school crises.

Including the federal reports cited earlier, multiple peer-reviewed journals described topics related generally to school crisis including school violence and school safety, with indirect reference to the involvement of school leaders. For example, authors in the field have called for educators to conduct ongoing safety assessments at local schools (Benbenishty, Astor, & Estrada 2008). Research on *school safety* has been reported in many peer-reviewed journals, with a specific focus on examining and preventing school violence. Authors describe how to improve the research on school safety by investigating focused areas of theoretical and conceptual research (Astor, Guerra, & Van Acker, 2010). Yet, there are no studies of the particular role of school leaders in preventing school violence. Other professionals, on the other hand, are featured frequently.

Much of the research found related to the roles and responsibilities of school psychologists, several of whom have been leaders in the school crisis area. The National Association of School Psychologists has produced many resources for school personnel, initially focusing on the response and recovery phases of school crises. A survey of school psychologists' experiences with crisis response in public schools revealed nearly all of the respondents received training through workshops, in-service trainings, personal study/reading, conferences and graduate coursework. Adamson and Peacock (2007) state "school psychology training programs could play a greater role in preparing school psychologists for crisis management in public schools" (p. 760).

Interestingly, the same study indicated that the principal is normally identified as accountable for student safety and often will be a leader of a school crisis team. The authors

extended this observation by noting that schools may not be ready to respond to a crisis if the school's administration does not make crisis preparedness a priority (2007). Their suggestions for administrators' approaches to crisis management include making it a priority in the schools; ironically, however, the *training* of school leaders was never addressed.

Providing support for the contention that school leader preparation has received little attention in the research literature are the federal data indicating a discrepancy between schools having written crisis plans verse conducting drills to prepare stakeholders. Despite the identification of high threat levels and the dire consequences of being unprepared to handle crises, the 2009 *Crime, Violence, Discipline, and Safety* in U.S. Public Schools Report discussed findings from the *School Survey on Crime and Safety* that indicate low preparedness in U.S. schools (Neiman, DeVoe, & Chandler, 2009). The survey examined schools to determine if they had written plans for specific crises, ranging from school shootings to pandemic flu, and examined if preparedness drills occurred in regards to these various crisis scenarios (Neiman et al., 2009). Findings indicate that 83% of reporting public schools across the country had a written crisis plan for shootings, while 95% had a plan for natural disasters. These same schools had a lower percentage of 71.3% for hostage situations. The percentage of schools with written crisis plans was the highest for bomb threats at 93.8%. The remaining percentages of the reporting public schools were as follows: 71.5% for chemical, biological, or radiological threats or incidents, 74.1% for suicide threat or incident, 40% for the change in the national threat level to red and 36.1% of public schools have a written plan for the Pandemic Flu.

Although these data might seem satisfactory, what is disturbing is that percentages dropped *significantly and in every category,* when public schools were surveyed about conducting *drills* in each of the above areas. For example, of the 83% of public schools who

have a written plan for school shootings only 52.2% conducted drills to prepare students and staff. In addition, the only mention of training in *any* of the above categories was a question asking schools to report how their efforts to reduce crime were limited by thirteen varying factors. One of the thirteen reported factors was the lack of or inadequate teacher training in classroom management to reduce or prevent crime (Neiman et al., 2009).

As Allen, Cornell, Lorek, and Sheras (2008) explain, school crisis measures may be muted by the perceived low likelihood of crisis. However, "the combination of high threat rates and low likelihood of violence creates a serious dilemma for school authorities, who must take all threats seriously because the potential consequences are so severe" (p. 320). Many schools have crisis response plans created from templates, from existing educational plans and/or based on reviewing incidents that have occurred in the setting. However, preparedness is only part of the crisis response picture. One must ask how leaders gain confidence in handling crises and develop the ability to find answers to crisis management-related questions *without* an actual crisis occurring? In order for successful crisis response procedures to be implemented, educational leaders must have confidence and preparation to take charge and manage a crisis situation. It is the bridge between thoroughly reviewed, clearly written preparedness plans and preparedness of a leader that allows for operative school crisis response. This bridge has yet to be built, if one considers the current research.

1.3.1   Standards and Skills of School Leaders

Allen et al. (2008) succinctly assessed the current state of crisis literature and preparation programs: "school safety is clearly on the agenda of school administrators as an important concern, but there is relatively little research on school safety improvement" (p. 329). Without

question, the ability to effectively manage crises in school settings contributes to the students' ability to feel safe, which, when combined with a sense of security, promotes a positive learning environment (Dorn, Thomas, Wong, & Shepard, 2004). For a school leader, this may seem obvious; however, faced with a crisis it can be daunting to determine the correct steps to take.

In 2008, the National Policy Board for Educational Administration adopted new Interstate School Leaders Licensure Consortium (ISLLC) standards. As an update to the 1996 standards, the 2008 standards provide better framework for preparation, licensing, induction, and professional development for school leaders (Council of Chief State School Officers (CCSSO), 2008). ISLLC consists of the following six corollary standards:

1. Setting a widely shared vision for learning;

2. Developing a school culture and instructional program conducive to student learning and staff professional growth;

3. Ensuring effective management of the organization, operation, and resources for a safe, efficient, and effective learning environment;

4. Collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources;

5. Action with integrity, fairness, and in an ethical manner; and

6. Understanding, responding to, and influencing the political social, legal, and cultural contexts (CCSSO, 2008, p.6).

Of the six standards listed, only one standard, standard three, addresses school safety. "An education leader promotes the success of every student by ensuring management of the

organization, operation, and resources for a safe, efficient, and effective learning environment"
(CCSSO, 2008, p.14). Specifically, Function C. states the following "promote and protect the
welfare and safety of students and staff" (CCSSO, 2008, p.14).

In an effort to define a central crisis curriculum, many states referenced the ISLLC
standards as the basis for educational leadership programs (CCSSO, 2008). University
leadership programs may offer crisis courses based on the ISLLC standards, but the level of
specificity and fidelity to these standards depends on the particular university and instructor.
Because of the deviation in presentation of ISLLC standards, some educational leaders may have
little to no exposure to crisis management in their preparation program.

Curriculum aside, some studies focused on the weaknesses and resiliency factors of
educational leaders in regards to crisis preparedness. For example, The Educational Policy and
Leadership Center (EPLC) explored the results of focus groups comprised of superintendents and
principals, centralizing discussions around the several weaknesses of current leadership
preparation programs (Education Policy and Leadership Center (EPLC), 2006). From this list of
weaknesses, the EPLC determined key qualities and abilities that comprise the necessary
knowledge and skills of principals and superintendents to be included in professional preparation
programs (EPLC, 2006).   The only reference related to school safety was maintaining a safe and
orderly environment (EPLC, 2006).

1.3.2   United States Department of Education Practical Information on Crisis Planning

In January 2007, the office of Safe and Drug-Free schools in the United States Department of
Education released a report entitled *Practical Information on Crisis Planning: A Guide for
Schools and Communities*. This report provides support for school personnel to establish a crisis

plan in a school or district. Whereas this report is a starting point for school-based crisis planning, the U.S. Department of Education Office of Safe and Drug-Free Schools (2007) identifies that "while a growing body of research and literature is available on crisis management for schools, there is little hard evidence to quantify best practices" (p. 1-4). This statement is an indicator of the inherent weaknesses the educational system has with trying to utilize best practice strategies.

This report describes four phases identified by experts in the field as a crisis prevention and management model. The phases *of Mitigation & Prevention, Preparedness, Response and Recovery* comprise the framework to create a model for crisis response seen in Figure 3. This Cycle of Crisis Planning illustrates how each phase flows into the other and are continually reviewed to navigate through a crisis situation.
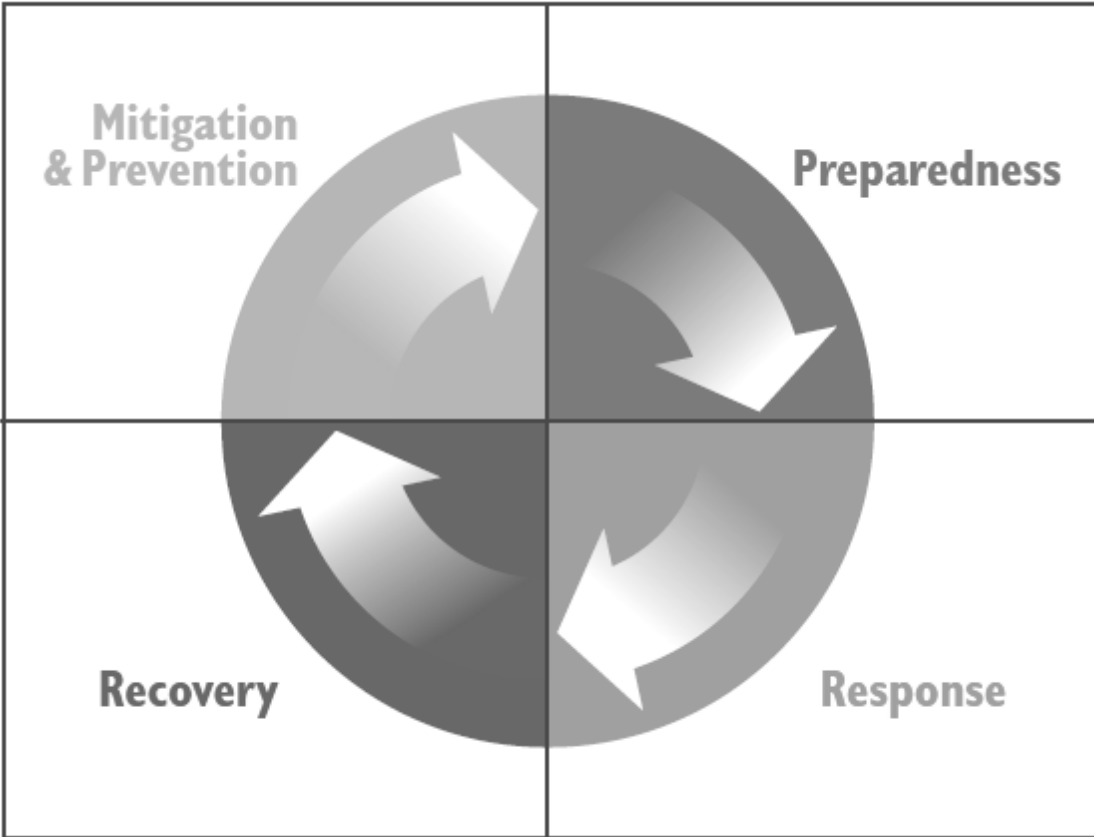
Figure 3

Reducing the likelihood of a tragic event and minimizing the effect is found in the Mitigation and Prevention phase. This phase focuses on taking the necessary safety precautions to reduce the risk of a crisis occurring. Visitor procedures ensuring controlled access to buildings, conducting drills and creating safety policies are all examples of ways for school districts to minimize the risk.

With every precaution and preventative measure in place, a school will still be susceptible to a crisis situation. Preparation is necessary to provide a response that will support students and staff safety in the event of an emergency situation. Time and finances are

important factors in the planning in this stage of crisis response. Developing policies, writing procedures and identifying the roles and responsibilities of the stakeholders will take careful consideration and time to implement.

Often the most public part of a school crisis is the response phase. After a crisis presents itself a number of decisions and actions will be made. Having a proper plan in place and following the plan will help support an immediate response. This phase addresses recommendations about the critical components of implementing the crisis plan. The response phase will often be reflective of the preparation and planning done prior to an incident occurring and will hopefully transition quickly into the recovery phase.

The time it takes to recover from a crisis situation will vary dependent upon the people involved and the scale of the crisis. In a school, the goal is to restore a sense of normalcy as soon as possible. Keeping in mind that the emotional impact will vary with individuals, decisions must be made to provide a caring and supportive school environment. As recovery time varies with individuals, this phase may last days to years. Anniversary dates should be taken into consideration as well as utilizing information learned from the experience to plan for the future.

The U.S. Department of Education collaborated with multiple experts in the field to create the report *Practical Information on Crisis Planning: A Guide for Schools and Communities* (2007). Competencies in each of the four phases of crisis response listed as actions steps are delineated in chapter 2. Coincidently the year this report was being published, Congress directed the United States Government Accountability Office (GAO) to assess emergency management in school districts and identify how assistance could be provided from the national government.

1.3.3 United States Government Accountability Office

In 2007, Congress instructed the United States Government Accountability Office (GAO) to assess emergency management in school districts. Members of the GAO conducted an extensive study by surveying a stratified random sample of all public school districts, state education and administering agencies. The GAO also interviewed federal officials, reviewed relevant documents and conducted site visits to school districts. In response to the request from congress, this report focused on three research questions: "(1) What are the roles of federal and state governments and school districts in establishing requirements and providing resources to school districts for emergency management planning? (2) What have school districts done to plan and prepare for emergencies? (3) What challenges, if any, have school districts experienced in planning for emergencies and communicating and coordinating with first responders, parents, and students?" (U.S. Government Accountability Office [GAO], 2007, p.2).

Considering there are no federal laws requiring districts to have emergency management plans addressing *multiple hazards* the GAO found that most states and schools had requirements for plans. In fact, the GAO estimated that 95 percent of all school districts have a written emergency plan. However, the content and scope of the plans varied significantly and many of the plans did *not* include recommended practices. For example, extended school closure was an area that was addressed in less than half of the school districts with emergency plans. Specifically, the continuation of student education in lieu of an extended shut down. Another factor listed in the report focused on the lack of preparedness when transporting students with special needs in an emergency situation.

A critical finding was school districts' shortage of individuals with expertise in planning and managing emergencies. This was evident from the surveyed results in an estimated 62

percent of all school districts. Officials identified challenges stemming from "lack of equipment and *personnel with expertise in the area of emergency planning"* (p. 39). Related to the problem of limited people with expertise, many school districts were unable to find sufficient time or funding to meet with first responders to provide training and to support crisis planning. Fewer than half of the school districts surveyed involve a local public health agency or include any local heads of government.

The GAO provided the following recommendations to address the emergency management of school districts. The first recommendation was directed to the Department of Homeland Security to ensure that state and local governments are aware that grant funds may be disbursed to schools under State Homeland Security Program, Urban Areas Security Initiative and the Citizen Corps.

An additional recommendation was given to the Department of Education in collaboration with Department of Homeland Security (DHS) and Department of Health and Human Services (HHS) to provide guidance to schools assisting students with special needs in an emergency. Extended school closures due to a crisis situation were identified as area school districts needed support by providing guidance from the Department of Education and the HHS.

The final recommendation focused on promoting efforts for *training for school district personnel* with first responders and community resources.

1.3.4 Summary

By researching the definition of crisis and the United States Government's response to crisis, the next logical step was to examine the implications for school leaders. Accordingly, this study

sought to contribute new knowledge to what we know about school leaders' crisis management competencies.

We know very little about formal course work, state requirements tied to certification or professional conferences offering crisis training to school leaders. There is limited research on professional development for school leaders in dealing with crisis in pre-service or continuing education. The GAO (2007) concluded that U.S. schools "lack specialized personnel and training with which to develop needed expertise" (p. 41). These reasons indicate a need for research on what competencies our education leaders possess for addressing school crises. Beyond informing the field of education, researching the skills of our public school leaders could inform policy in terms of certification and preparation of school and district leaders.

2.0   METHODOLOGY

2.1   IMPORTANCE OF THE STUDY

Research in the field reveals a wide range of crisis preparedness in public school administrators. For example, the GAO report indicated many discrepancies between school districts across the country in crisis response planning. One area of focus throughout the report was the inconsistency of qualified or trained people within an educational organization.   Where do educational leaders gain the knowledge and training to respond to a school crisis? Through this literature review, the author uncovered a gaping hole in the literature in the *training of school leaders* in crisis response.

A school leader's response to a crisis situation will often be evaluated publicly after a disastrous event has occurred. In some instances, the outcome may be beyond the control of the school leader; however, a leader's planning and response can impact the eventual outcome and recovery. This is why crisis training is vitally important for school leaders. With the proper training, a leader can prepare a school to plan, prepare, respond and recover from a crisis situation.

2.2 STATEMENT OF THE PROBLEM

A school leader can be faced with a crisis on any given day. Moreover, how a school leader responds to a crisis can greatly influence the impact on the school community. An extensive review of the crisis literature within the field of education (Brock, Lazarus & Jimerson, 2002; Fein, Vossekuil, & Pollack, 2002; Kerr, 2009; U.S. Department of Education, 2007) and in a broader context (U.S Department of Homeland Security, 2007; Yusko & Goldstein 1997), has identified a list of common competencies and best practices. However, research suggests school districts have a shortage of individuals with expertise in managing emergencies (GAO, 2007). The field of education will benefit from objective research to determine school leaders' familiarity with crisis competencies. Such knowledge could influence state policies governing preparation programs as well as continuing education for school leaders.

2.3 RESEARCH QUESTIONS

This study was conducted to determine school leaders' preparation in crisis response. Specifically:

1. What are the essential competencies required of school administrators for crisis management?

2. How familiar are school administrators with the competencies in each phase of crisis management?

3. Where do school leaders primarily receive their training in crisis management?

2.4   PROCEDURES

2.4.1   Choosing an Instrument

A survey instrument provides an economical way to gain generalizable information and has the benefit of a quick turn-around time (Cresswell, 2003). This is the ideal data collection instrument for the inclusion of a greater number of individuals, and provides the opportunity for quantitative as well as qualitative data collection. SurveyMonkey™, an Internet survey provider was utilized: 1) to provide participants easy and immediate access to the survey from an invitation email, 2) to eliminate the potential of data entry errors that can arise from paper copies, and 3) to minimize respondent burden (i.e., not requiring receipt or return of postal mail, not requiring scheduled telephone or in-person discussions).

A review of the literature produces no viable measures to be used in assessing school administrators' familiarity with competencies for crisis response, so a new instrument, the School Crisis Management Competencies Survey (SCMCS), is tailored to fill that need. This survey collected quantifiable data on school administrators' familiarity with crisis competencies and assess training backgrounds. Using this survey, the research also collected some qualitative feedback that helped better to understand school leaders' familiarity with crisis response competencies and to evaluate the survey itself.

2.4.2   Defining the Construct

To understand the construct of crisis response, a review of the literature provided relevant competencies from multiple sources. Each of the six selected sources contains competencies that

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can be categorized into each phase of crisis response. Some of sources had a concentration of a single phase of crisis response. For instance, the Introduction to the Incident Command System for Schools (DHS, 2007) has as its primary focus the *response* phase. The remaining sources provided similar competencies in all phases of crisis response. Competencies sharing similar themes were grouped and an encompassing competency was selected or formulated (See Table 2).

The identified competencies in Table 2 are arranged according to the four phases of crisis response outlined in the *Practical Information on Crisis Planning* (U.S. Department of Education, 2007): Planning and Mitigation, Preparedness, Response, and Recovery.   This report provides the framework for crisis response specifically for schools from the United States Department of Education.   This guide is designed to provide critical concepts and components of crisis planning while providing best practice examples.   The following sources provide competencies that are incorporated into this framework.

The Incident Command System for Schools by is designed to apply a broad set of crisis competencies to the more specific context of school based incidents. "The Incident Command System, or ICS, is a standardized, on-scene, all hazard incident management approach" (DHS, 2007. p.1-6).   Training courses are available and designed to provide overall incident management skills to school based personnel including the appropriate communicative procedures with emergency responders.   These training modules objectives identify specific competencies that appear in the response phase.

The U.S. Department of Education and U.S. Secret Service (2002) created the *Threat Assessment in Schools: A Guide to Managing Threatening Situations and to Creating Safe School Climates* to provide a threat assessment approach in schools. This guide was selected

because it is designed to help schools create a threat assessment team to determine what actions to take when a concern is identified and when to involve outside services such as law enforcement.

Brock, Lazarus, and Jimerson's (2002) work in school crisis response was chosen because it has been referenced by many authors in the field including the *U.S. Department of Education's Practical Information on Crisis Planning*. Best Practices in School Crisis Prevention and Intervention incorporates leading international experts in the field of school crisis prevention and intervention.

Kerr's (2009) work provides a model designed for a school practitioner. This selection affords the reader hands-on examples and opportunity for reflection for the reader to take the concepts of crisis response and incorporate them directly into the school environment.

The work of Yusko and Goldstein (1997) incorporates a unique element to this research. The Yusko group, a management consulting firm, develops job-relevant crisis management simulations for organizations. These simulations are utilized by companies to select and develop effective crisis leaders.

Each of these documents provided research-based competencies in the field of crisis response. The next step, then was to design a survey that reflected these competencies.

2.4.3   Quantifying the Construct Of Crisis Management Competency Familiarity

A pool of seventy-eight original items was drawn from the identified themes. Item content was crafted to reflect cross-cutting themes from the relevant literature (See Table 2). The item-writing process reflects best practices for increasing content validity (face validity) in the field of scale development (DeVellis, 2003):

- Create a large item pool that reflects the content area, and then reduce it to the 'best' (most concise and salient) items. The final item set should be substantially smaller than the original item pool, while maintaining a broad perspective on the construct.
- Items should be as brief and concise as possible without sacrificing the underlying meaning.
- Unnecessary jargon should be replaced with common language.
- Items should be positively worded to avoid confusion and double-negative response options.
- Items should vary in 'difficulty' to provide high, mid-range, and low scores for a construct.
- Item framing (context) and response options should be consistent among items.
- Response options should be in a logical order and lend themselves to meaningful differentiation between response levels (p.37).

For consistency within the construct of crisis management competency familiarity, all items are preceded by "How familiar are you with…" An unbalanced response scale (0 = not at all, 1 = a little bit, 2 = somewhat, 3 = quite a bit, 4 = very much) was chosen instead of a balanced scale (e.g., very unfamiliar … very familiar) to avoid a negative context to the items. Each familiarity item is paired with a categorical item, asking "What contributed most to your familiarity with..." (college coursework, in-service training, intermediate unit training, online training, other training/workshop, personal experience, N/A). Presenting the same item stem in both contexts (familiarity and origin of familiarity), allowed for direct relationships to be drawn between the two.

Pairs of items were organized thematically and then presented in four consecutive sections (Prevention and Mitigation, Preparedness, Response and Recovery), corresponding to the order of crisis competencies described in the literature (U.S. Department of Ed., 2007). This grouping format establishes relatedness of questions within respective sections, and the ordering format provides an intuitive flow between sections. Within sections, items are organized with more-complex or context-specific concepts towards the end of sections. This strategy provides a better frame of reference for more 'difficult', thematically similar items (McFarland, 1981). This

approach enhances clarity and presentation continuity, which may contribute to better completion rates. The benefits of this presentation outweigh the alternate benefits of item randomization (i.e., controlling order effect bias) in this particular population. Malhotra (2008) found that survey order effects are of less serious concern for populations with higher levels of educational attainment. A static questionnaire format will also lend itself to ease of use in future research on the topic.

2.4.4 Qualifying the Data

Open-ended questions provide an important opportunity for respondents to qualify survey responses and provide information in their own words (Walonick, 2004). On the other hand, they also increase respondent burden, potentially resulting in participants abandoning the process of completing the survey (Crawford, Couper, & Lamias, 2001). To balance these concerns, the placement of open-ended questions received serious consideration. A compromise was to provide "optional" short-answer prompts at the bottom of each of the sections and to number the pairs of items, allowing respondents easily to comment on particular themes in the survey. Each of the four major sections has a comment box labeled "Optional: Feedback on this section" where subjects can provide information in their own words. The content of these data allows for a clearer understanding of participants' perspectives on crisis procedures, and provides insight on the clarity and relevance of items.

2.4.5 Characterizing the Sample

The sample is characterized through a final set of three items: 1) building grade level (grade school, middles school, high school), 2) respondent education level, and 3) years of experience in a school leadership role. These data helped to evaluate the diversity of the sample without collecting identifying information that might inhibit responses.

2.4.6 Sampling

This study utilized a convenience sample of principals and assistant principals who work in Western Pennsylvania public schools. By ensuring that respondents are from Pennsylvania, the results were not confounded by differences among state education regulations. Because private schools function under regulations different from public schools, avoiding these institutions in the sample allowed for a more homogenous group for measuring baselines. While convenience sampling introduces some bias into the study (Cresswell, 2003), this approach provided the opportunity to draw upon multiple channels of contact and thereby maximize the available sample.

Superintendents were identified through professional networks and publicly available information sources (i.e., school district websites). The investigator initially contacted superintendents through e-mail from the director of the professional network (See Appendix A) and followed-up with an email to provide details of the study and seek permission (See Appendix B) to contact district principals. Appropriate channels for communicating with principals and assistant principals were determined in accordance with the superintendent's guidelines. Forty superintendents were contacted from The Western Pennsylvania Forum for

School Superintendents and sixty-two superintendents were contacted from Tri-State Area School Study Council. One hundred ninety-two principals and assistant principals were identified (Eighty-eight from the Forum and one hundred four from Tri-State) and sent email invitations (See Appendix C) to participate in an anonymous survey about familiarity with crisis competencies. The number of invitations sent was used to quantify response rate and no identifying information was linked to survey data. All initial contact documents included a description of the significance of the research and university affiliation of the study-- two factors that possibly increased survey response rates (Sheehan, 2001).

2.4.7 Respondent Burden

Respondent burden is a primary concern when choosing the survey delivery and response method. Survey completion rates benefit from providing indicators of survey burden (i.e., time requirements and number/complexity of questions) prior to and during data collection (Crawford, et al., 2001). Paradoxically, standard "progress bar" displays (as available on SurveyMonkey™) are not likely to affect significantly a survey's participation rates (Crawford, et al., 2001). In light of this, potential participants were informed about the expected completion time and number of competencies (pairs of items) assessed, when they were invited to participate and again at the beginning of the survey. The survey completion time was estimated at fifteen minutes, or approximately less than four minutes per section. Although there is no definitive guideline for the number of items in this type of survey, Hinkin (1998) recommends four to six items per construct (in this case, per phase of crisis management). The final collection of 24 competencies (item pairs) provided five – eight items to represent each of the four sections covering the phases of crisis response.

2.5   ANALYSIS

The research questions are exploratory in nature, and, therefore, the researcher's primary concern was to describe the data obtained on crisis management familiarity, its four phases, and individual competencies within the process. The data were used to describe the present sample and to set baselines so that future researchers might also use this instrument, compare results from other geographical areas, and gain a greater understanding of school crisis management competencies.

2.5.1   Qualitative Analysis

Qualitative feedback provided 1) added insight into relevant competencies that were covered (or overlooked) in the survey and 2) feedback on the survey itself (e.g., format, functionality). The data were classified into one of these two categories and examined for common themes. These themes helped to gain information not captured through the survey items and assessed potential improvements to the survey.

2.5.2   Quantitative Analysis

SPSS analysis software was used to explore quantitative data. For these analyses, the survey yielded 1) nominal values from the 24 categorical items on familiarity and the items used to characterize the sample (e.g., level of education), 2) ordinal values for the familiarity data obtained from the 24 scale items, and 3) nominal and ordinal values obtained through modeling the survey data. The overall familiarity score and the four phase scores are considered interval

data. The nominal, ordinal, or interval data types determined what sorts of statistical summaries and tests were performed on these data

Nominal Data

Each of the 24 'familiarity origin' (i.e., "What contributed the most to your familiarity with…") items provide nominal data. These data can be described in terms of the frequency with which particular options are endorsed, but not in terms of central tendency (calculating a mean or median provides no useful information for categorical data). Nominal data can be analyzed with only non-parametric statistics such as Chi-square test or Spearman correlation) (Gravetter & Wallnau, 2009). Familiarity origin items can be pooled together (cumulative frequency within subjects) and determined where individuals received most of the training experience that contributed to their crisis familiarity. This created an 'overall origin' variable for each subject. This pooled item method also was used to examine the overall origin for each of the four phases of crisis management.

2.5.2.1 Ordinal Data

Each of the 24 'familiarity' (i.e., "How familiar are you with…") items provided a number ranging from zero to four. These data are considered ordinal because the responses follow a logical order, but the actual difference at one interval (e.g., from "Not at all" to "A little bit") is not necessarily the same as at another interval (e.g., from "A little bit" to "Somewhat"). Raw ordinal data can be described in terms of frequency, median, and mode, and analyzed with only non-parametric statistics. Assuming that all competencies are valued the same, these values are summed to create a score of overall familiarity (from 0-96). Alternately, if the phases of crisis management are considered equally important, average scores from each phase are added

together to get an 'overall familiarity' score (from 0-16). The four average 'phase scores' were used to examine familiarity with the four phases of crisis management.

2.5.2.2 Interval Data

As mentioned earlier, the overall familiarity score and the four phase scores are considered interval data. This data type is not useful for frequencies, but can provide more useful measures of central tendency (i.e., mean, standard deviation) than ordinal data. Interval data can be used to calculate both parametric and non-parametric statistics. Years as a building level administrator, a characterization of the sample, is also considered an interval data point.

2.5.2.3 Describing the Data

Frequencies and measures of central tendency were examined for each of the familiarity items, overall familiarity scores, and scores for the four phases of crisis management. Frequency tables were used to examine familiarity origin items and the overall origin variable. Summaries were compared and patterns were explained with the goal of articulating possible relationships among competencies, level of familiarity, and familiarity origin.

3.0 FINDINGS

3.1 CRISIS COMPETENCIES

The assemblage of crisis competencies (Table 2) provided the construct for the questions in the survey tool---crisis leadership. To understand the construct of crisis leadership, a review of the literature provided relevant competencies from multiple sources. From the six sources selected, competencies were categorized into each phase of crisis response: prevention, planning, response and recovery.

Table 2: Competencies from the Literature

Prevention and Mitigation			Resource and Pages				
Item	Competency	A	B	C	D	E	F
1	*Conduct a safety audit*	29		85, 19	2--5		
	Conduct a threat assessment of violence in the school	29, 61 132	17, 48	19, 100			
	Identify outside threats	433		83, 127	2--5		
	Identify common incidents inside the school	37, 61	17	85	2--6		
	Identify factors related to school violence	132		107			
	Assess the school's emotional climate		11, 69	110			
2	*Establish a prevention planning team*	24	72	20			
	Create a multidisciplinary threat assessment team	24	37	5			

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3	*Collaborate with outside emergency response agencies*	58		19, 61 83, 127	2--5		
4	*Implement a bullying prevention program*	35, 171	13, 70	111			
	Create a nurturing environment safety and respect	53, 69	11, 70 71	110			
	Promote student involvement in planning	24	13				
	Emphasize the importance of listening in schools		13, 69	110			
	Implement a social skills training program	153					
	Implement peer mediation and conflict resolution	111 191					
	Ensure that every student has one adult mentor at school		11, 71				
5	*Implement a suicide prevention program*	211		23			

Preparedness

Resource and Pages

Item	Competency	A	B	C	D	E	F
6	*Create a crisis plan*	24, 39 276		15, 20	3--2		
7	*Define roles and responsibilities of the crisis team*						
	Create crisis team	24, 276		35, 43	3--3		218
	Define roles and responsibilities	24, 283	74	35	3--5		
8	*Develop a crisis communication plan*	56, 284		16, 37 72	3--6		
	Establish a rumor control hotline	61		66, 72			
	Prepare for crisis team debriefing	349		51, 61			
9	*Plan action steps for placing a school in lockdown*						
	Plan action steps to evacuate staff and students from the building			10	3--7		
	Prepare for security following a crisis	285					
	Plan action steps to place the building in lockdown			10	3--7		
	Develop accountability and student release procedures			16	3--10		
	Prepare for medical issues	280		93			

Item	Competency	A	B	C	D	E	F
10	*Prepare emergency drills and crisis exercises for staff, students and emergency responders*			51	3--11		
	Conduct drills or readiness checks	285		51			
	Provide staff with necessary equipment to respond to a crisis			50	3--7		
	Develop a directory of local, state, and national resources	283		49			
	Create site maps and facility information for emergency responders			49	3--10		
11	*Create board policy and procedures*						
	Create Policy	54	72	17			
	Establish a permanent emergency fund	56					
	Consider liability issues	96			3--11		

Response

				Resource and Pages			
Item	Competency	A	B	C	D	E	F
12	*Assume role of incident commander and respond to crisis situation*						
	Assume position of incident commander until relieved by proper authority	345		21, 36		4--25	218
	Take command	346		21, 36		4--25	217
	Assess the crisis	285		36	4--2		217
	Organize the five major management functions					2--11	
	Size up the situation and make rapid decisions			21	4--2	4--24	217
	Identify patterns and inter-relationships in information derived from multiple sources			21			220
	Determine whether the information necessary to make a decision is available or attainable			35			220
	Assess the effectiveness of tactics/strategies			35		4--25	
	Decompose an issue to identify the steps necessary to address the crisis			21			220
	Modify plans as necessary			21	4--5	4--25	220
	Develop alternative solutions to a problem and understand the costs and benefits of each			22			220
	Balance response initiatives with safety concerns			37		4--25	
13	*Consider security and safety needs*	286		37			

Item	Competency	A	B	C	D	E	F
14	*Document action during response*				4--5		
15	*Communicate with all stakeholders*						
	Motivate responders					4--25	220
	Instill follower confidence (empowering followers in a crisis)						220
	Communicate clear directions	349		35, 61	4--4	4--25	218
	Disseminate crisis information	286		37, 61			218
	Debrief and evaluate the crisis response	286		61	4--4		218
	Negotiate and demonstrate conflict resolution skills			112			220
	Demonstrate interpersonal sensitivity						220
	Consider cultural considerations	293		19			
16	*Facilitate assistance to victims and crisis team i.e. medical, psychological, basic supports*						
	Provide victim assistance	346		94	4--3		
	Address medical needs	285		37	4--3		
	Assess psychological trauma and provide crisis intervention services	286		37			
	Support a crisis team (basic supports)			16, 22 185			
	Hold daily intervention sessions with the crisis response team members	349		16, 61 185			
17	*Work with other incident commanders in a unified command system*			61		5--10	218
18	*Notify appropriate emergency responders*			21 61	4--2		
19	*Evacuate a school to a safe location*			35	4--3		

Recovery

		Resource and Pages					
Item	Competency	A	B	C	D	E	F
20	*Return school environment to a calm routine as quickly as appropriate*						
	Return students to learning as quickly as possible			16, 130	5--3		
	Determine recovery time (may take months or years)	347		131 142	5--5		
21	*Conduct safety audit after crisis to determine if repairs are necessary*	441			5--3		
22	*Communicate with media and community*						
	Keep students, families and the media informed	441		61	5--3		
	Conduct daily debriefings for staff, responders and other assisting in recovery	444		22	5--4		
23	*Assess emotional needs of staff, students, families and responders*	441		16, 22	5--3		
	Identify Individuals at risk for psychological trauma	310 369		16			

	Provide the opportunity for crisis intervention			
	Provided stress management during class time		130 142	5--4
	Provide the opportunity for group crisis intervention	347 385	39, 119 142	
	Provide the opportunity for individual crisis intervention	347 405	39, 119 142	
24	*Evaluate and consider future implications of crisis and response*			
	Remember anniversaries		178	5--5
	Evaluate recovery efforts for future preparation	347	16	5--6

Notes:

Resources: A) Brock, Lazarus & Jimerson (2002); B) Fein, Vossekuil & Pollack (2002); C) Kerr (2009); D) U.S. Department of Education (2007) E) U.S Department of Homeland Security (2007); F) Yusko & Goldstein 1997;

"Item number" designates competencies that are retained as items in the final survey instrument. In cases where resources are not listed for the retained competencies, the items were crafted to encompass one or more related competencies listed after the item.

3.2   SAMPLE CHARACTERISTICS

Of the 192 building administrators contacted, 82 responded to the survey. Of the 82 respondents, approximately 70% ($n = 57$) responded within one full day of receiving the invitation email. An additional 20% ($n = 16$) responded within the following three days, and the responses averaged about one per day for the week following. Two cases were excluded as incomplete, because the respondents completed fewer than half of the survey questions. Of the 80 included participants, 30 worked at the elementary school level, 18 at middle school / junior high, and 28 at high school ($n = 76$ reported). Sixty-three completed a master's degree and 12 completed a doctoral

degree (*n* = 75 reported). Respondents worked as building level administrators for an average of 8.53 years (min = 1, max = 25, SD = 5.22, *n* = 75 reported).

3.3   HOW FAMILIAR ARE SCHOOL ADMINISTRATORS WITH THE COMPETENCIES IN EACH PHASE OF CRISIS MANGAGMENT?

For the 24 familiarity items, responses tended towards the upper-middle section of the response set. On the 0-4 response scale, 11 item medians fell on "Somewhat" and 13 fell on "Quite a bit". See Table 3 for distributions of each item.   All items being equally weighted, the overall "average item" score was 2.41 (SD = 0.721, min = 0.83, max = 3.75). These data indicate building level administrators' average scores fall between "somewhat" and "quite a bit" on all familiarity items. This may indicate a relatively high level of familiarity.

Each of the four sections (or factors) of crisis management yielded scores similar to the overall score. For the four factors, Prevention had a mean score of 2.31 (SD = 0.742, min = 0.40, max = 3.80), Preparation's mean score was 2.59 (SD = 0.810, min = 0.67, max = 4.00), Response's was 2.62 (SD = 0.844, min = 0.75, max = 4.00), and Recovery's was 2.11 (SD = 0.897, min = 0.20, max = 4.00). Averaging the four factors provides a mean score of 2.38 (SD = 0.710, min = 0.84, max = 3.70), and provides an overall "average factor" score that is not affected by the uneven number of items among the factors. Based on the factor scores in each of the four sections, administrators' familiarity with crisis management fell between "somewhat" and "quite a bit".

These data provide two overall scores. Considering that each of the four sections has differing numbers of competencies, the "average factor" score can provide an equal weighting for each of the four sections. The overall score of 2.41 and the average factor score of 2.38 were relatively close.

Table 3: Percent of Responses for Each Familiarity Item.

Item #	N	Not at all (0)	A little bit (1)	% Somewhat (2)	Quite a bit (3)	Very much (4)
Prevention						
1	80	12.5	15.0	37.5*	26.3	8.8
2	80	11.3	6.3	46.3*	27.5	8.8
3	76	-	7.9	38.2	32.9*	21.1
4	79	1.3	3.8	22.8	31.6*	40.5
5	80	26.3	18.8	26.3*	22.5	6.3
Preparation						
6	80	1.3	3.8	40.0	35.0*	20.0
7	78	1.3	7.7	38.5	2.1*	20.5
8	78	2.6	10.3	35.9	34.6*	16.7
9	80	1.3	3.8	12.5	40.0*	42.5
10	79	2.5	6.3	22.8	35.4*	32.9
11	80	23.8	21.3	32.5*	17.5	5.0
Response						
12	80	10.0	12.5	28.8*	31.3	17.5
13	77	-	6.5	22.1	44.2*	27.3
14	78	6.4	14.1	28.2	30.8*	20.5
15	75	-	13.3	28.0	41.3*	17.3
16	79	3.8	16.5	35.4*	31.6	12.7
17	79	10.1	13.9	35.4*	26.6	13.9
18	77	-	6.5	23.4	37.7*	32.5
19	79	1.3	3.8	21.5	43.0*	30.4
Recovery						
20	76	3.9	5.3	30.3	38.2*	22.4
21	77	24.7	15.6	32.5*	18.2	9.1
22	76	11.8	26.3	28.9*	23.7	9.2
23	78	9.0	19.2	38.5*	25.6	7.7
24	77	6.5	11.7	41.6*	32.5	7.8

Notes: Missing values were excluded from analysis, so item responses will equal 100%.
Underlined numbers correspond to modal values and * correspond to medians.

In the Prevention section, one item clearly stood out from the others. Item number 4 (implement a bullying prevention program), had a modal value of 4 (i.e., most respondents endorsed "Very much"), whereas all other items within this factor had modal values of 2 ("Somewhat"). Though the other factors contained items with modes of 2 or 3, only one other item (item 9 in Preparation, *plan action steps for placing a school into lockdown*) had a mode as extreme as this. Assuming that the items validly measure the underlying constructs as intended, these are the two aspects of crisis management with which principals, in general, reported to have the most familiarity. Other items that tended towards the top end of the spectrum, where at least 25% of the respondents endorsed "Very much", were (in order from largest proportion down) item 10 (prepare emergency drills) from Preparation, and items 18 (notify appropriate emergency responders), 19 (evacuate a school to a safe location), and 13 (consider security and safety needs) from Response. No items met this criterion from Recovery, though item 20 (return a school environment to a calm routine as quickly as appropriate) was only 3% away.

A few items were at the low end of the spectrum as well. Item number 5 (implement a suicide prevention program) in Prevention was bimodal (two categories share the most responses), which was particularly interesting because one of the modal values was at "Not at all", which is the lowest modal value among all items. This was the only item where at least 25% of the respondents endorsed the lowest level, though item 11 (create board policy and procedures) from Preparation and item 21 (conduct a safety audit after crisis to determine if repairs are necessary) from Recovery were less than 1.5% away from meeting this criterion. These seemed to be the three most extreme items at the bottom of the spectrum. All other items had, at most, 12.5% of responses at "Not at all".

The rest of the items tended towards the middle of the spectrum. Overall, the spread of item responses demonstrated a broad continuum of data, an encouraging indicator that the these items performed relatively well as an overall measure of crisis management familiarity.

3.4   WHERE DO SCHOOL LEADERS PRIMARILY RECEIVE THEIR TRAINING IN CRISIS MANAGEMENT?

"Personal experience" was most frequently endorsed as contributing the most to respondents' familiarity with each of the aspects of crisis management. Exceptions to this pattern were limited to items 4 (implement a bullying prevention program) and 5 (implement a suicide prevention program) in Prevention, where "In-service training" and "Other training/workshop" (respectively) more frequently contributed the most to familiarity. Averaged across all items, "Personal experience" accounted for 43.8% of the responses. For item 3 (collaborate with outside agencies) in Prevention, items 9 (plan action steps for placing a school in lockdown), 10 (prepare emergency drills and crisis exercises for staff, students and crisis responders), and 11 (create board policy and procedures) in Preparation, 14 (document action during response), 15 (communicate with all stakeholders), and 18 (facilitate assistance to victims and crisis team) in Response, and 20 (return school environment to a calm routine) and 22 (communicate with media and community) in Recovery "Personal experience" was endorsed by at least 50% of respondents. Averaged across all items, the least-frequently endorsed response was "Intermediate Unit training" (2.3%), followed by College coursework" (3.0%), "Online FEMA training (4.8%), "In-service training" (18.0%), and "Other training/workshop" (28.1%). Proportions for individual items are listed below (Table 4).

Table 4: Percent of responses for each origin item.

Item #	*n*	College coursework	In-service training	Intermediate Unit training	Online FEMA training	Other training / Workshop	Personal experience
Prevention							
1	69	4.3	18.8	1.4	8.7	26.1	<u>40.6</u>
2	70	5.7	15.7	8.6	7.1	24.3	<u>38.6</u>
3	77	1.3	14.3	1.3	2.6	20.8	<u>59.7</u>
4	77	1.3	<u>41.6</u>	3.9	1.3	39.0	13.0
5	56	1.8	33.9	1.8	-	<u>42.9</u>	19.6
Preparation							
6	79	5.1	19.0	2.5	6.3	27.8	<u>39.2</u>
7	76	5.3	18.4	1.3	9.2	28.9	<u>36.8</u>
8	73	2.7	17.8	1.4	6.8	32.9	<u>38.4</u>
9	77	-	18.2	1.3	3.9	26.0	<u>50.6</u>
10	76	-	14.5	1.3	3.9	30.3	<u>50.0</u>
11	57	8.8	10.5	1.8	-	17.5	<u>61.4</u>
Response							
12	69	1.4	18.8	2.9	10.1	26.1	<u>40.6</u>
13	77	-	13.0	5.2	5.2	28.6	<u>48.1</u>
14	70	2.9	10.0	1.4	5.7	28.6	<u>51.4</u>
15	73	1.4	15.1	2.7	1.4	27.4	<u>52.1</u>
16	66	1.5	22.7	1.5	7.6	31.8	<u>34.8</u>
17	69	1.4	14.5	1.4	10.1	34.8	<u>37.7</u>
18	75	-	14.7	2.7	5.3	22.7	<u>54.7</u>
19	76	-	19.7	1.3	-	31.6	<u>47.4</u>
Recovery							
20	69	1.4	14.5	1.4	1.4	20.3	<u>60.9</u>
21	51	5.9	17.6	2.0	3.9	33.3	<u>37.3</u>
22	62	8.1	16.1	1.6	1.6	22.6	<u>50.0</u>
23	66	4.5	16.7	1.5	4.5	30.3	<u>42.4</u>
24	65	6.2	16.9	3.1	7.7	20.0	<u>46.2</u>

Notes: Missing values and "N/A" responses were excluded from analysis, so item responses = 100%. Underlined numbers correspond to modal values.

3.5   PATTERNS AMONG ITEMS

Throughout analyses, one item was unique. Item 4 on bullying in Prevention stood out among the others with respect to familiarity scores (top two highest scores) as well as origin of familiarity (the only item where "In-service training" contributed the most -one of two items where another category contributed more than "Personal experience"). Examining patterns between familiarity scores and origin of familiarity further illustrated the uniqueness of this particular item (see Figure 4). Most respondents who had moderate-to-high familiarity scores, obtained this familiarity primarily through in-service training and other training/workshops. In contrast, respondents who obtained this familiarity primarily through personal experience (which was more common among all other items), had relatively lower scores on familiarity. No other items displayed such a clear pattern between familiarity and origin, in favor of trainings over personal experience.
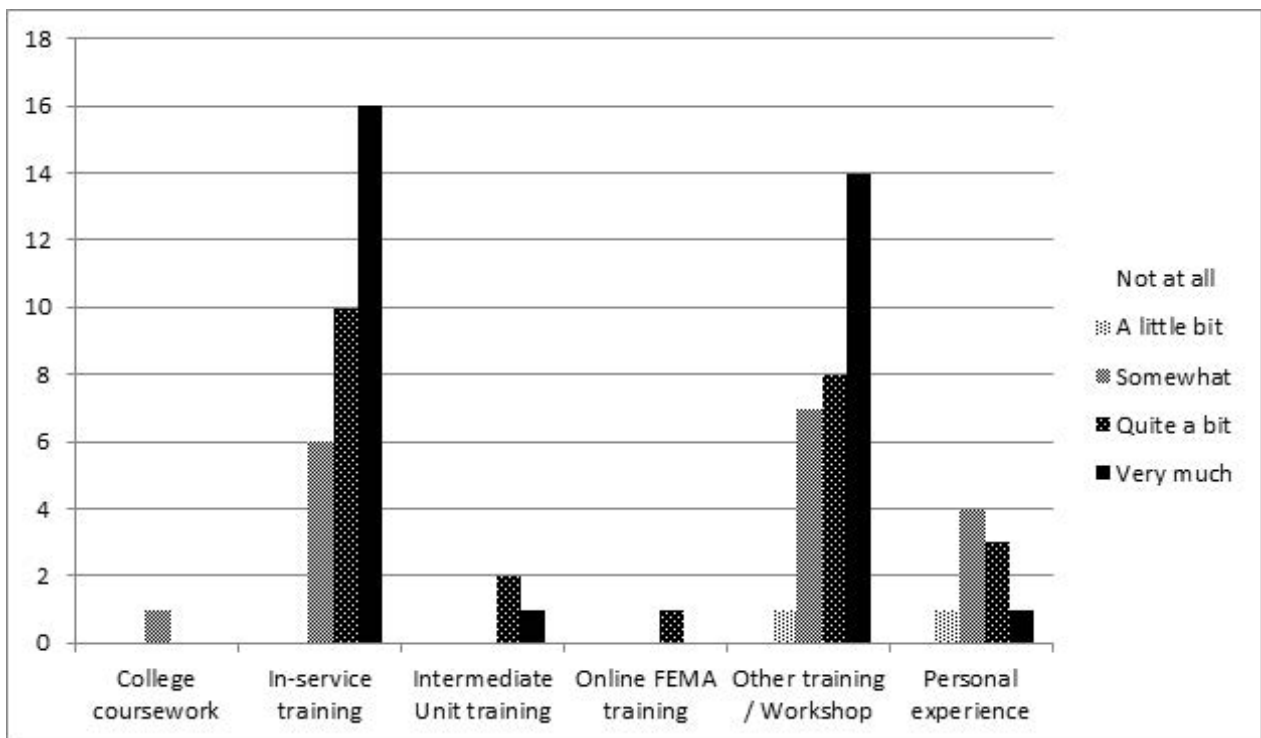

Figure 4: Number of responses: Origin by familiarity for item 4.

3.6   QUALITATIVE DATA

Fifty comments were provided by respondents to the survey. Nineteen comments were provided in the overall section with 13 in Prevention and six comments for each of the remaining three categories. No participants provided feedback on the quality or clarity of survey items or on the overall survey content. This was encouraging as it indicated support for the value of the survey tool and the possibility of utilizing this tool for further research efforts.

A theme became apparent throughout the comments offered by administrators. The *importance of training* in the area of crisis management was prevalent in the responses.   Many of the comments were similar to this building level administrator's statement:

> "I don't ever think we spend enough time reviewing for all of the situations that may occur. I feel I am prepared in some respects for certain emergencies, but for other situations that were presented in this survey, I feel that I am very unprepared and left to my basic instincts".

Another administrator's comment reinforcing this theme was, "training needs to be ongoing to keep it in the forefront. Since it is not used regularly, practice is important". The overarching theme was followed with various comments on how the training occurs.

Multiple administrators commented on either how they were trained or what type of training was more appropriate. These comments provided some conflicting arguments. For instance, a building level administrator stated "I have participated in most of the options presented for each of the questions above. I have a little over 20 years' experience as a building principal. Training and education are helpful. However, the most useful to feeling familiar and comfortable is first-hand experience. Until you have it, you will not feel familiar." Conversely, another administrator's comment speaks to the negative ramifications of not having training prior

to a crisis occurring: "As a principal, unfortunately a lot of the specifics in regards to these plans are learned on the job and in cases of crisis happening at the building level".   Many administrators commented on the importance of ongoing trainings with some arguing specific forms of training such as scenario based trainings with outside agencies (e.g., law enforcement).

Some administrators' personal experiences were revealed through their comments. For example, administrators with experience in Juvenile probation, volunteer firefighting, school counseling, mental health and community service were provided with some experiential training in the area of crisis management. The quote that provides the most poignant perspective of the overall theme is: "I would welcome more training, even if it would be mandatory".

3.7   LIMITATIONS OF THE STUDY

Considering the exploratory nature of this study, limitations will naturally occur. A limitation to the tool itself was assigning value to levels of familiarity. Although this set of values was accounted for in the formation of the tool, there is subjectivity in the degree of familiarity between response options. For example, responders could have differing opinions on what constitutes "a little bit" versus "somewhat".

4.0   IMPLICATIONS

4.1   DISCUSSION

The following section will highlight and review the significant findings of this study.

4.1.1   Crisis Management Competencies

A disturbing fact uncovered through this research was the lack of clear specific competencies in handling crises available to educational leaders. Utilizing sources within education, government, and the private sector, a list of crisis management competencies was developed (Table 2). These competencies can provide the framework for educational institutions or affiliated agencies to create the foundation for crisis training that is targeted specifically to school leaders. The identification of these common competencies alone has the underpinnings of a tremendous opportunity to inform the field of educational leadership about crisis management.

4.1.2   Personal Familiarity versus Education and Training

The findings of this study suggest that building level administrators' familiarity with common crisis competencies falls in the range of "somewhat" to "quite a bit". Very few administrators responded with "very much" in any of the categories. Ironically, personal experience was the

overwhelming chosen category of the familiarity. *An alarming implication reveals principals primarily become familiar with crisis competencies through personal experience.* This finding is concerning first because school leaders lack sufficient personal experiences with the array of crises to develop deep expertise. School crises are relatively rare events that will not take place frequently in an individual school leader's career. Secondly, school leaders without formal training on the research underlying crisis prevention, mitigation, preparation, planning, response, and recovery will not have the deep knowledge from which to base the inevitable situational decisions (Kerr, 2009). Thirdly, lacking adequate experience and expertise, school leaders may generalize from a single incident to other incidents, often inappropriately (Kerr, 2009). This finding, coupled with the comments solicited from the respondents, demonstrates an overwhelming need for preservice education in all aspects of the school crisis model as well as ongoing training in crisis management.

A supporting piece of data to this point was discovered in question 4 "How to implement a bullying program?". This question recorded the building level administrators' familiarity to be "very much" the highest level of familiarity. Considering that House Bill No. 1067 was passed in 2007 requiring districts adopt bully prevention policies this finding is logical. Moreover, in the wake of growing public concerns regarding bullying, grants for schools to develop or implement bullying prevention programs have increased in recent years. The training necessary to implement these programs may have provided administrators the confidence to choose "very much" as an indication of their comfort level with this competency.

Conversely, question 5 "How to implement a suicide prevention program?" has a bimodal distribution of "somewhat" and "not at all". These results are significantly different from the bullying question where administrators felt very much familiar. Varying factors could

influence this response including sheer lack of training. Another factor, considering administrators' highest selection under training was "experience." Some respondents may not have experienced a student death by suicide in their school. After all, suicide is a rare event (Kerr, 2009). On the other hand, bullying is much more prevalent. Of concern, however is the well-documented contagion in suicide, a factor that many school leaders might not address unless they had formal training. Although the survey respondents reported that personal experience was the source of the majority of their crisis training, their comments revealed that building level administrators prefer to have training *prior* to an incident occurring. Some building level administrators added value judgments about the training options. For instance, an administrator quoted:

> "I have found scenario-based trainings to be the most beneficial. They afford professionals the opportunity to discuss responses and strategies. They are current, have (unfortunately) happened in other districts, and create a sense of urgency in the participants of the training. This takes incredible time and shared planning but the learning that results is, in my opinion, worth the effort".

All principals who responded had at least a master's degree. Yet, the data revealed that college coursework was rarely the source of school leaders' familiarity with all 4 categories of crisis management. One could infer that principal preparatory programs need to provide the opportunity for coursework in crisis management so that school leaders receive this training *prior* to crisis events.

4.1.3 Policy and Procedure Development in Crisis Management

In the preparedness section, as with the overall results, the majority of responses fall within the "somewhat" category. Interestingly, question 9 was a shift to more familiarity with "how to plan action steps for placing a school in lockdown". This could indicate that placing a school into lockdown has become a standard operating procedure in the years following the Columbine massacre. Question 11, "how to create or help create board policy", familiarity levels are on the lower end of the spectrum possibly due to limited opportunities or need for building level administrators to create or work on board policy. Policy development is often the job of the superintendent and assistant superintendents. Similarly, in response to question 21 "How to conduct a safety audit after a crisis to determine if repairs are necessary" a significant number of "not at all" responses were selected. Again, this pattern may be related to the scope of a building level administrator's job description. Safety audits for facilities could be seen as a role of the buildings and grounds department.

4.2   RECOMMENDATIONS FOR FUTURE RESEARCH

4.2.1   Replication of Study on a National Basis

Although, this exploratory study was conducted with a relatively small sample size considering the numbers of school districts across the state of Pennsylvania and across the country, the crisis competencies compiled through this research can be utilized by any school leader across the nation. This study used convenience sampling, which can lead to some bias due to the limited

scope of this research. However, this study could be replicated across the United States to gain a better understanding of crisis management competencies at a national level. Larger sample sizes would also allow for more in-depth statistical analyses. For example, one could then compare average familiarity scores among states or make inferences about individual factors (e.g., educational attainment, years of experience) affecting school leaders' familiarity with crisis management competencies. Because the School Crisis Management Competencies Survey (SCMCS) was crafted with careful attention to content validity, crisis management researchers are encouraged to utilize this instrument in its present form. The researcher encourages contacts from investigators who desire to use the SCMCS in future research. De-identified data from the current study can be made available upon request for the purpose of validating the instrument or for comparison with newly acquired data.

4.2.2   Study Needs for Crisis Training in All Types and Levels of School Personnel

As stated in the limitations section, building level administrators are but one group of stakeholders in crisis management. Other members of the school community influence the outcome of crisis situations. The opportunity for schools to become consistent in initiatives often comes from the central office. A study of this nature could benefit from researching members of the central office, members of the school board of directors, and student support staff such as counselors. All could provide important data to extend this research. The results could inform additional needs for personnel preparation as well as ongoing continuing education.

4.2.3 Competency-based Training and Education

A final recommendation from this study is the development of high quality trainings for school leaders based on the crisis management competencies. The question of where administrators received their training does not necessarily address their awareness of training opportunities *available.* For instance, principals may not be aware of online FEMA courses. The creation of effective crisis management training for educational leaders supported by qualified facilitators and based on identified competencies will lead to providing safer educational environments.

4.3   CONCLUSIONS

The pressure that mounts as a crisis unfolds can be daunting. The demands placed upon the school administrator in such a situation generate a myriad of significant and time-sensitive decisions. The biggest challenge is trying to make the appropriate decisions with the goal of restoring a sense of normalcy back to the school. The research presented here is only the first step towards a full understanding of how best to prepare school leaders for the challenges of preventing, responding to, and recovering from a major school crisis.

Experts in the field of crisis management have identified competencies or best practices that can support educational leaders managing crisis situations. Organizations such as FEMA and the Department of Education have provided resources to aid in planning, preventing, responding and recovering from crises. Nevertheless, this study exposed a deficiency in educational leaders' familiarity with these resources. Moreover, no group had identified crisis competencies specific to the role of a school leader. In large measure, school leaders reported

that their competency in a crisis derived from personal experiences. Yet, school leaders do not have the vast number of experiences, the specialized preparation, nor the supervision to learn all they need to know experientially. Given the number of crises schools have dealt with throughout our recent history, it is shocking that so little attention has been given to how we prepare those who protect our children during a school's darkest hours. With that daunting mission in mind, it is this researcher's hope that the compilation of the crisis competencies and the survey tool created for this study will provide the foundation for future studies in the crisis training and education of educational leaders.

APPENDIX A

SUPERINTENDENT REQUEST

Dear (Professional Network) Colleague:

One of our doctoral students, Sean McCarty, is surveying principals and assistant principals regarding his dissertation research on school leaders managing crisis situations. As a member of (Professional Network) we would greatly appreciate permission for your principals and assistant principals to participate in Sean's survey. This is a very important topic in our field today and the more we know the better it will be for the next generations of school leaders. You will receive an e-mail from Sean this week requesting permission to contact the building level administrators in your district to take this brief survey.

Thank you in advance for your contribution to the profession.

(Professional Network Director)

SUPERINTENDENT PERMISSION LETTER

October 27, 2011

Dear Superintendent,

With the support of my committee, Drs. Longo, Werlinich, Kerr and Vander Ven, and of Dr. Diane Kirk, I am conducting a survey of local principals and assistant principals to determine their familiarity with crisis competencies recognized in the field. I would like to invite the principals and assistant principals in your district to complete an anonymous web-based survey, which will take no more than 15 minutes. I will not ask them for information about their names, school names, job-related duties or district policies or specific events within your district.   All information will be strictly confidential, and at no time will your district be named.

A school leader can be faced with an unforeseen crisis on any given day. Moreover, how a school leader responds to a crisis can greatly influence the impact on the school community. Through an extensive review of the crisis literature within and outside the field of education, a list of common competencies and best practices has been identified. However, research suggests school districts have a shortage of individuals with training in managing emergencies.

My research will attempt to determine how familiar public school principals are with crisis response competencies and possible training or experience they have encountered in preparation for leadership positions.   If this information would be of interest to you, I would be

happy to provide you with the overall results upon completion. The goal of this research is to improve principal preparation.

I understand you are extremely busy, and if you give me permission by replying to this email, I will contact your administrators in the near future by email and send them an invitation to take the online survey. Thank you for your time and consideration and I hope to hear from you.

Sincerely,

Sean McCarty

University of Pittsburgh

Doctoral Candidate

APPENDIX C

PRINCIPAL INVITATION

Dear *(School District Name)* Principals and Assistant Principals,

    (District's Superintendent Name) granted me permission to contact you requesting support to conduct my research. The purpose of this research study is to determine school leaders' familiarity with a standard set of crisis competencies. For that reason, I will be contacting public school principals and assistant principals in Western Pennsylvania and requesting the completion of an electronic survey. If you are willing to participate, the survey will ask about background (e.g., years as a school leader and level, elementary, middle, or high school), as well as familiarity with a set of crisis competencies and if training was provided. There are no foreseeable risks associated with this project, nor are there any direct benefits to you. This is an entirely anonymous questionnaire, so your responses will not be identifiable in any way. All responses are confidential, and results will be kept under lock and key. Your participation is voluntary, and you may withdraw from this project at any time. This study is being conducted by Sean McCarty, who can be reached a txxx-xxx-xxxx, if you have any questions.

    Please click on the link below and you will immediately connect to the online survey that should take less than 15 minutes to complete.

    http://www.surveymonkey.com/s/PHVLBTY

Thank you for taking time out of your very busy day to support this important research topic.

Sincerely,

Sean McCarty

Doctoral Student

University of Pittsburgh

SURVEY

Thank you for taking a few minutes to complete this survey. The information that you provide is valuable for our understanding of the preparation that school leaders have---and need--- for addressing school crises. We are especially interested in what kinds of training contributed to your crisis prevention and intervention skills.

The survey is comprised of questions about crisis training (divided into four sections). You will also have the opportunity to provide clarification or additional details at the end of this survey. You WILL NOT be asked to provide information identifying you or your school or district.

The questions are broken into four sections. This first set of questions asks about certain procedures that are used to PREVENT crisis situations.

How familiar are you with...

1) How to conduct a safety audit.

   o   Not at all

   o   A little bit

- o   Somewhat

- o   Quite a bit

- o   Very much

What contributed the most to your familiarity with…

How to conduct a safety audit.

- o   College Coursework

- o   In-Service Training

- o   Intermediate Unit Training

- o   Online FEMA Training

- o   Other Training/Workshop

- o   Personal Experience

- o   N/A

How familiar are you with...

2) How to establish a prevention planning team.

- o   Not at all

- o   A little bit

- o   Somewhat

- o   Quite a bit

- o   Very Much

What contributed the most to your familiarity with…

How to establish a prevention planning team.

- o   College Coursework

- In-Service Training

- Intermediate Unit Training

- Online FEMA Training

- Other Training/Workshop

- Personal Experience

- N/A

3) How to collaborate with outside emergency response agencies.

- Not at all

- A little bit

- Somewhat

- Quite a bit

- Very Much

What contributed the most to your familiarity with…

How to collaborate with outside emergency response agencies.

- College Coursework

- In-Service Training

- Intermediate Unit Training

- Online FEMA Training

- Other Training/Workshop

- Personal Experience

- N/A

4) How to implement a bullying prevention program.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to implement a bullying prevention program.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

5) How to implement a suicide prevention program.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to implement a suicide prevention program.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

Optional: Please share any thoughts you would like about your own preparation for crisis prevention.

_____

_____

_____

The questions are broken into four sections. This second set of questions asks about certain procedures that are used to PREPARE FOR crisis situations.

6) How to create a crisis plan.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to create a crisis plan.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

7) How to define roles and responsibilities of a crisis team.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to define roles and responsibilities of a crisis team.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

8) How to develop a crisis communication plan.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to develop a crisis communication plan.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

9) How to plan action steps for placing a school in lockdown.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to plan action steps for placing a school in lockdown.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

10) How to prepare emergency drills and crisis exercises for staff, students and emergency responders.

- o   Not at all

- o   A little bit

- o   Somewhat

- o   Quite a bit

- o   Very Much

What contributed the most to your familiarity with…

How to prepare emergency drills and crisis exercises for staff, students and emergency responders.

- o   College Coursework

- o   In-Service Training

- o   Intermediate Unit Training

- o   Online FEMA Training

- o   Other Training/Workshop

- o   Personal Experience

- o   N/A

11) How to create or help to create board policy and procedures for crisis response.

- o   Not at all

- o   A little bit

- o   Somewhat

- o   Quite a bit

- o   Very Much

What contributed the most to your familiarity with…

How to create or help to create board policy and procedures for crisis response.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

Optional: Please share any thoughts you would like about your own perspective on crisis preparation.

_____

_____

_____

These questions are broken into four sections. This third set of questions asks about certain procedures that are used to RESPOND TO crisis situations.

12) How to assume the role of incident commander in response to a crisis situation.

- o Not at all

- A little bit

- Somewhat

- Quite a bit

- Very Much

What contributed the most to your familiarity with…

How to assume the role of incident commander in response to a crisis situation.

- College Coursework

- In-Service Training

- Intermediate Unit Training

- Online FEMA Training

- Other Training/Workshop

- Personal Experience

- N/A

13) How to consider security and safety needs.

- Not at all

- A little bit

- Somewhat

- Quite a bit

- Very Much

What contributed the most to your familiarity with…

How to consider security and safety needs.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

14) How to document action during a crisis response.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to document action during a crisis response.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

15) How to communicate with all stakeholders in a crisis situation.

- o Not at all
- o A little bit
- o Somewhat
- o Quite a bit
- o Very Much

What contributed the most to your familiarity with…

How to communicate with all stakeholders in a crisis situation.

- o College Coursework
- o In-Service Training
- o Intermediate Unit Training
- o Online FEMA Training
- o Other Training/Workshop
- o Personal Experience
- o N/A

16) How to facilitate assistance to victims and crisis team (i.e., medical, psychological, basic supports).

- o Not at all
- o A little bit
- o Somewhat
- o Quite a bit

      o Very Much

What contributed the most to your familiarity with…

      How to facilitate assistance to victims and crisis team (i.e., medical, psychological, basic

supports).

      o College Coursework

      o In-Service Training

      o Intermediate Unit Training

      o Online FEMA Training

      o Other Training/Workshop

      o Personal Experience

      o N/A

17) How to work with other incident commanders in a unified command system.

      o Not at all

      o A little bit

      o Somewhat

      o Quite a bit

      o Very Much

What contributed the most to your familiarity with…

      How to work with other incident commanders in a unified command system.

      o College Coursework

      o In-Service Training

      o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

18) How to notify appropriate emergency responders.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to notify appropriate emergency responders.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

19) How to implement evacuation to a safe location.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to implement evacuation to a safe location.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

Optional: Please share any thoughts you would like about your preparedness for crisis response.

_____

_____

_____

These questions are broken into four sections. This fourth set of questions asks about certain procedures that are used to RECOVER FROM crisis situations.

20) How to return the school environment to a calm routine as quickly as appropriate.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to return the school environment to a calm routine as quickly as appropriate.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

21) How to conduct a safety audit after a crisis to determine if repairs are necessary.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to conduct a safety audit after a crisis to determine if repairs are necessary.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

22) How to communicate with media and community in the aftermath of a crisis.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to communicate with media and community in the aftermath of a crisis.

- o College Coursework

- In-Service Training

- Intermediate Unit Training

- Online FEMA Training

- Other Training/Workshop

- Personal Experience

- N/A

23) How to assess the emotional needs of staff, students, families and responders.

- Not at all

- A little bit

- Somewhat

- Quite a bit

- Very Much

What contributed the most to your familiarity with…

How to assess the emotional needs of staff, students, families and responders.

- College Coursework

- In-Service Training

- Intermediate Unit Training

- Online FEMA Training

- Other Training/Workshop

- Personal Experience

- N/A

24) How to evaluate and consider future implications of crisis and response.

- o Not at all

- o A little bit

- o Somewhat

- o Quite a bit

- o Very Much

What contributed the most to your familiarity with…

How to evaluate and consider future implications of crisis and response.

- o College Coursework

- o In-Service Training

- o Intermediate Unit Training

- o Online FEMA Training

- o Other Training/Workshop

- o Personal Experience

- o N/A

Optional: Please share any thoughts you would like about crisis recovery.

_____

_____

_____

Finally, these questions will help us to understand your background and additional information that you may be able to offer. Please DO

NOT provide names of persons (including yourself) or educational institutions (including current/past employers or colleges that you have attended).

Please share any thoughts about crisis management that might be important for us to consider in the development of preparation and continuing education programs.

_____

_____

_____

Answering the following questions is optional but appreciated:

What is the level of your building?

- o Elementary School

- o Middle/Junior High School

- o High School

How many years have you been working as a building level administrator?

_____

What is the highest level of education that you have completed?

- o College Graduate

- o Some Graduate School

- o Master's Degree

- o Doctoral Degree

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