

2017

Policy Decisions and Options-Based Responses to Active Shooters in Public Schools

Vicki M. Abbinante
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Walden University
2017

Abstract

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by

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CAS, University of Illinois at Urbana-Champaign, 2007

MA, Northern Illinois University, 1984

BS, Northeastern Illinois University, 1978

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education

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May 2017

Abstract

Active shooter events in K-12 schools have increased since 1990, and developing response policies to such events is a responsibility of school personnel. A paucity of data regarding options-based response practices existed with no focus on policy processes. The purpose of this qualitative multi-case study was to describe the decision-making processes used in school districts when approving the inclusion of options-based responses to active shooter events in Emergency Operations Plans (EOPs). The research questions addressed processes that shaped the development of options-based responses to active shooter policies in 3 K-12 school districts within the Midwest. The conceptual framework was informed by the theory of policy paradox and the concepts of situational awareness and resilience. Structured interviews were conducted with 12 school personnel and safety professionals involved in 3 high schools; EOPs and state and federal regulations and guidelines were reviewed. An analysis of the interview responses and document reviews using four levels of descriptive coding required a cross-case analytic technique to discover patterns, connections, and themes. Law enforcement and school personnel worked together to create policy and to implement trainings related to options-based response. Results included enhancing situational awareness and empowering teachers and students to become responsible for their safety. These findings can be used to inform and guide school leaders in their efforts to make policy and implementation decisions regarding active shooter policies in EOPs. The potential for social change exists in more school personnel understanding and implementing options-based response policies and making the lives of K-12 students safer.

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Dedication

This study is dedicated to all educators who have lost their lives trying to protect their students from harm.

This study is also dedicated to educators who work tirelessly everyday so that students can be prepared academically, socially, and emotionally to deal with the complex world in which they live.

This study is dedicated to the educators of the 3:17 Club. Their impact on the lives of students is remarkable.

Acknowledgments

I would like to acknowledge Dr. Kathleen Lynch for her guidance and motivation throughout my PhD journey. I would also like to acknowledge Dr. Christina Dawson for her advice and encouragement as a member of my committee. I am truly grateful that both of these committee members understood the urgency and importance behind a study that concerned the safety of school children during this critical time in history. Also, I would like to mention my mother, Judy Hagen Kovarik, who taught me I could do anything I set my mind to do and my father, Edward Hagen, who planted the seed of the idea of earning a PhD many years ago; my son Justin, who was my greatest cheerleader; my son Brandon, who was my best technical adviser and tireless supporter; and my loving husband, George Mosho, without whose patience and love this study would not have been possible.

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Chapter 1: Introduction to the Study

In addition to the responsibility teachers feel for the academic progress of students, educators are concerned for their safety (Dorn, Satterly, Nguyen, & Dorn, 2013). A safe place to learn is necessary for continuous academic improvement (Cornell & Mayer, 2010). Unfortunately, when educators worry about student safety in the 21st Century, it includes more than preparing for fires or tornados. One of the real hazards school personnel are preparing for is the threat of an active shooter. Traditionally, school emergency operations plans (EOPs) have called for a lockdown response when dealing with an active shooter event (Adams, 2013). However, from what has been learned from school attacks over the last two decades, it is the opinion of some experts that an active shooter event should be met with an options-based type of response (Morris, 2014; U. S. Department of Education, 2013;).

This study examined the attitudes of K-12 educators and law enforcement professionals regarding the options-based response, as well as the processes used by those professionals when making policy decisions concerning the inclusion of the options-based response in school district EOPs. To gain an accurate understanding of the process of school safety policy making, the goals of political decision-making development were examined. Training protocols, as discussed in EOPs, were examined to understand expectations for response.

School district personnel across the United States are engaged in school safety policy-making decisions. I sought to provide an understanding of political decision-making processes regarding school safety that would assist those personnel in successful

school safety policy-making decisions, especially those decisions concerning active shooter events. In assisting school districts with policies regarding school safety, this study could potentially save the lives of students and school personnel. In this chapter, I will introduce the study by examining the background of the topic, stating the problem and the purpose, and examining the research questions. I will also explain the conceptual framework, look at the nature of the study, and define keywords necessary to understand the research. The assumptions, scope and delimitations, limitations, and significance of the study will all be discussed prior to summarizing the chapter.

Background of the Study

An active shooter event is one emergency that most educators have come to fear (Adams, 2013). The increase in anxiety for educators (Dorn et al., 2013) may have something to do with the rise in school massacres in the last 20 years (Lankford, 2013). Even before the United States was a nation, the first school massacre occurred in the colony of Pennsylvania. In 1764, American Indians attacked a schoolhouse and killed a teacher and 10 students, leaving three students alive (Rocque, 2012). The 1800s would continue to see many shootings involving students and teachers; however, none included more than two victims (Rocque, 2012). It was not until 1927 in Bath Township, Michigan at the Bath School that people in this country would be shocked by the murders of 38 elementary aged students and six educators, with the use of bombs and guns (Rocque, 2012). In 1966, citizens would witness the killing of 16 individuals on the campus of the University of Texas during a sniper shooting (Lankford, 2013). In 1976, the California State University at Fullerton massacre would occur, resulting in the deaths of seven

(Lankford, 2013). In 1989 and 1991, there was respectively a high school and university shooting in which six deaths occurred at each school (Lankford, 2013). However, it was not until April 20th, 1999 in Littleton, Colorado at Columbine High School where 15 died, that many U. S. citizens became aware of a growing threat to the safety of students (Lankford, 2013). Following the massacre at Columbine, eight died in a shooting at Red Lake Senior High in Minnesota (Lankford, 2013). Also, in 2006, six students were killed in an Amish school in West Nickel Mines, Pennsylvania (Lankford, 2013). In 2007, 33 were murdered at Virginia Tech University (Kelly, 2012). In 2008, six students were shot dead at Northern Illinois University (Kelly, 2012). In 2012, school community members across the country had a wake-up call they will never forget. That wake-up call came in the form of the a massacre of 26 primary-grade students and teachers at Sandy Hook Elementary School in Newtown, Connecticut (Kelly, 2012). In May of 2014, seven were gunned down by a fellow student on the campus of the University of California (Kelly, 2014). In October of that same year, a student walked into a cafeteria in Marysville Pilchuck High School in Washington and shot five students (Kelly, 2014). These examples are just some of the tragedies of active shooter events U. S. schools.

The rise in mass school shootings has become the impetus for a reexamination of EOPs in schools, especially the annexes to the EOPs that address active shooter events (Bonanno & Levinson, 2014). This reexamination has promoted policy changes and funding at the federal, state, and local levels. Inasmuch as people believe that students need a safe environment to learn and must be protected from danger while they are at school, legislators do not always agree on how to provide the safety necessary for

academic achievement (H.R. Rep. No. 113-6, 2013). Legislators at the federal level had begun to address school safety issues in 1994 with the passing of The Gun-Free Schools Act (P. L. 103-382 Sec. 14601, 1994) This law encouraged states receiving federal funds for education to pass their own laws requiring their schools to become zero tolerance schools in regard to any reference to guns.

When the Columbine massacre occurred in 1999, all levels of government workers began to make policies that would make schools safer (Rocque, 2012). As school shootings continue, so do efforts at policy making. Many ideas for policies become contentious, such as gun laws, zero tolerance rules, and methods of response (Council of State Governments Justice Center, 2014).

At the time of this study, there had been no research completed on the topic of the options-based response in school EOPs. The rise in school massacres was a relatively recent event, and the public focus on school response was even more recent (Bonanno & Levinson, 2014). Such a focus had left the field of school safety open for research studies. When working together to establish school safety policies, educators and public safety professionals brought with them attitudes and other influences that impacted the process of decision-making. Understanding these attitudes, influences, processes, and training protocols helps equip schools with improved tools for community collaboration and school safety programming. This study on the process of adopting an options-based response in school EOPs provides research on the topic of crisis response in school safety.

Problem Statement

On any given school day, there are approximately 75 million students attending school across the United States (National Center for Education Statistics, 2014). It is a concern of federal, state, and local governments, as well as school personnel that each one of those students remains safe from all hazards. Since April 20th, 1999, when 15 were killed and 24 wounded at Columbine High School, educators have felt more distress over keeping students safe from an active shooter event (Dorn et al., 2013). From 1966 through 2014, there has been an increase in mass school shootings (Kelly, 2015).

One obstruction to the process of learning in schools is often the anxiety and tension caused by violence or the threat of violence felt by students and staff (Barrett, Jennings, & Lynch, 2012; Cornell & Mayer, 2010). When students feel safe, they are more available for learning (Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). When working together to establish school safety policies, educators and public safety professionals bring with them attitudes and other influences that will impact the process of decision-making. Educators and public safety professionals become policymakers when developing crisis plans for the safety of students.

There is a discrepancy between response plans for active human threats developed by policymakers and what practitioners assert about disaster behavioral response during crisis events. School safety policy may dictate one behavioral response while human beings under the stress of a crisis may react differently than the policy requires. It is unknown how the research on disaster behavioral response during crisis events impacts school safety policy development, yet this information seems critical to the effectiveness

of the policy. It is not known whether the local decision-making process concerning response to active shooter events takes into account disaster behavioral response during crisis event scenarios.

Purpose of the Study

The purpose of this qualitative multiple case study is to describe the decision making processes used by school districts, as well as the attitudes of school district personnel and public safety professionals when approving the inclusion of options-based responses to active shooter events in EOPs. Through examination of political goals used by school communities when approving the use of an options-based response, I sought to discover patterns, connections, and themes that may assist education and public safety professionals in the development of high quality emergency operations plans. Ultimately, this study will lead to the development of policies that keep students and teachers safe in their schools. When students feel safer, academic achievement improves (Barrett et al., 2012).

Research Questions

RQ 1: What processes are used by school district personnel that lead to the adoption of an options-based response to an active shooter event becoming part of the EOP policy?

RQ 2: How do political goals influence the adoption of options-based responses to active shooter events becoming part of EOP policies?

RQ 3: How are theories of informed situational awareness taken into account in the development of an options-based response to an active shooter event becoming part of the EOP policy?

RQ 4: How is the maximum outcome of resilience planned for in the development of an options-based response to an active shooter event policy?

Conceptual Framework

The conceptual framework for this study is based on the theory of the policy paradox in political decision-making (Stone, 2012), the concept of informed crisis response through situational awareness, and the concept of organizational and individual resilience. These three concepts work well together when describing the policy-making decision process of K-12 schools in preparing for emergency operations and the reality of responding to crises in a school environment. The theory of policy paradox explains efforts by educators and public safety professionals to develop policies with the use of knowledge and scientific information that are also impacted by many community goals (Stone, 2012). Informed by an actual crisis event, such as an active shooter, individuals or organizations may choose to respond in a manner contrary to policy based on situational awareness of the event (Pauls et al., 2009). The concept of resilience is relevant to when individuals or organizations can make an informed crisis response to save the lives of school personnel and students (Ripley, 2008). These concepts become the lenses through which the queries investigated by the research questions are investigated. Policy paradox, situational awareness, and resilience all play a part in discovering processes, attitudes,

goals, and training plans for options-based response policies. More specific links will be discussed in Chapter Two.

For example, a school superintendent and a police chief develop a policy that requires teachers at a school to respond to shots fired by locking their doors, turning off lights, and taking cover in a corner of the room with any students present. Depending on how closely the crisis event matches the event predicted in the school EOP and the response engaged in by school personnel, school personnel could anticipate a maximum outcome, an uncertain outcome, or an outcome of resiliency.

Crisis Event Scenario That Matches Policy

A crisis event occurs that is similar to the event described in the EOP. When delineating the exact response for a particular annex, the EOP assumes a predictable crisis event scenario. School personnel have been instructed, trained, and drilled in the response according to the described crisis event scenario.

Educators Respond as Directed in the EOP. The response to the crisis event follows the EOP as instructed. With careful attention to emergency operations planning and school personnel who have been adequately instructed, trained, and drilled, in the prescribed response for each annex, there is a readiness for this crisis event scenario.

Maximum Outcome The best outcome in any crisis scenario is for the lives of all students, school personnel, and the perpetrator to be saved. When there is time to practice the exact scenario in the form of tabletop exercises, functional exercises, and full school drills, it is more likely that the response will save the maximum number of lives.

Example In this case, a shooter would enter a building during classroom time. A teacher looking out of his or her classroom door would recognize the shooter and alert the office. The office would call for a lockdown. All teachers would lock their doors, turn off their lights, and take students to the corner to take cover. The office would call police. There would be no students in the hallway. Police would arrive and arrest the shooter. There would be no casualties or fatalities.

A similar situation took place in March 2005 in Red Lake, Minnesota at a high school in the middle of the afternoon when everybody was in class. A student entered the school with several weapons, first shooting an armed guard. The school went into lockdown. The student walked up and down the hallways firing shots. Every classroom followed the response procedure as had been instructed and drilled, except for one. The students in that classroom were not quiet, and the lights were not turned off. The gunman could hear screaming coming from the room. The gunman shot through the glass in the door and opened the door. He shot the teacher and all of the students, killing seven and wounding five. All of the other classrooms that followed the prescribed response were safe (Benson, 2012). There are more examples of such incidents that will be explored in Chapter Two.

Crisis Event Scenario That Does Not Match Policy

A crisis event occurs that has no similarity to the scenario described in the EOP. The crisis event scenario used to instruct, train, and drill school personnel to respond under this particular annex bears no similarity to what is described in the school EOP.

The event may differ in time of day that it occurs, where students are located, where the perpetrator is located, the weapon chosen by the perpetrator, and many other variations.

Educators Respond as Directed in the EOP. The crisis event scenario is different than what is described in the EOP; only one response has been instructed, trained and drilled under each annex. School personnel choose to respond to the crisis event in the only way that they know how to respond. They respond as directed in the EOP.

Outcome Uncertain An uncertain outcome can be frightening as it puts the lives of students, school personnel, and the perpetrator in danger. The response is not informed by the situation; rather, by an imagined scenario outlined in the EOP. While school personnel are responding to the imagined scenario, the real scene is taking place, and the result for the safety of individuals is chaos with an uncertain outcome.

If a shooter enters a hallway that is dense with students and teachers in the early morning; teachers run to their classrooms, lock the doors, turn off the lights and take the few students who happened to be in the classroom to the corner to take cover. Many students are screaming that their friends were left out in the hallway where they hear gunfire. The shooter is shooting the many students who were not in the classrooms. There are many casualties and fatalities.

Prior to March 2014, the school personnel of a high school in Murrysville, Pennsylvania had never practiced responding to a student stabbing other students, before school had started, when halls were full of students. The student, armed with two large kitchen knives, ran through the halls and up and down stairs, stabbing students. At one

point, he pulled the fire alarm to bring more students into the hallways. School personnel reacted in different ways. Many responded by following a lockdown procedure, leaving many students in the hallway. Some responded to the fire alarm and evacuated students into the hallway and into the arms of the perpetrator. It was the assistant principal and another student who finally took down the perpetrator. This chaotic outcome resulted in 25 injuries (Memcott, 2014). Many other examples could be cited, and will be explored further in Chapter Two.

Educators Respond Informed by Situational Awareness. The crisis event scenario is different than what is described in the EOP, only one response has been instructed, trained and drilled under each annex. Under this crisis event scenario, school personnel realize that the response they have been instructed to use will not save lives. Informed by situational awareness, school personnel make choices to respond in ways that will save the most lives possible.

Outcome of Resiliency The school personnel will enter into an interactive process with their environment by assessing the situation and making decisions informed by that awareness. These decisions will have little to do with the current EOP, but will be based on saving the lives of students, school personnel, and perhaps the perpetrator. The outcome of resiliency is physical and emotional survival.

Example In this case, the shooter is in a hallway that is dense with students and teachers. Because teachers and students are not in classrooms, the school safety policy cannot be successfully followed. At that time, the teachers, informed by their situational awareness of the crisis, must respond in a manner that will save the lives of students and

other educational personnel. Some teachers run with students in tow, getting them out of the building. Other teachers push students into classrooms, lock and barricade doors, and take cover. Other teachers confront the shooter and take action against him or her. Each of these teachers acted in a resilient manner to save lives.

In January 2014, a similar scenario occurred in a middle school in Roswell, New Mexico. As students gathered in the gym prior to starting the school day, a 12-year old began to fire into the crowd with a sawed-off 20-gauge shotgun. A social studies teacher confronted the student, risking his life, but eventually talked the student into handing the weapon over to him. While the social studies teacher confronted the student with the gun, another teacher quickly began evacuation of the other students who were in the gym. There was no plan in the school's EOP for this scenario. Both of these teachers used informed situational awareness to make immediate decisions that ultimately saved many lives. The New Mexico school shooting was an example of a resilient outcome resulting in no fatalities and only two casualties (Rebora, 2014). For this study's purpose, they were viewed as having acted in a resilient manner and such actions will be explored further in Chapter 2. The following figure illustrates the way in which the concepts of policy paradox, informed situational awareness, and resiliency form the conceptual framework of this study.

Conceptual Framework Model

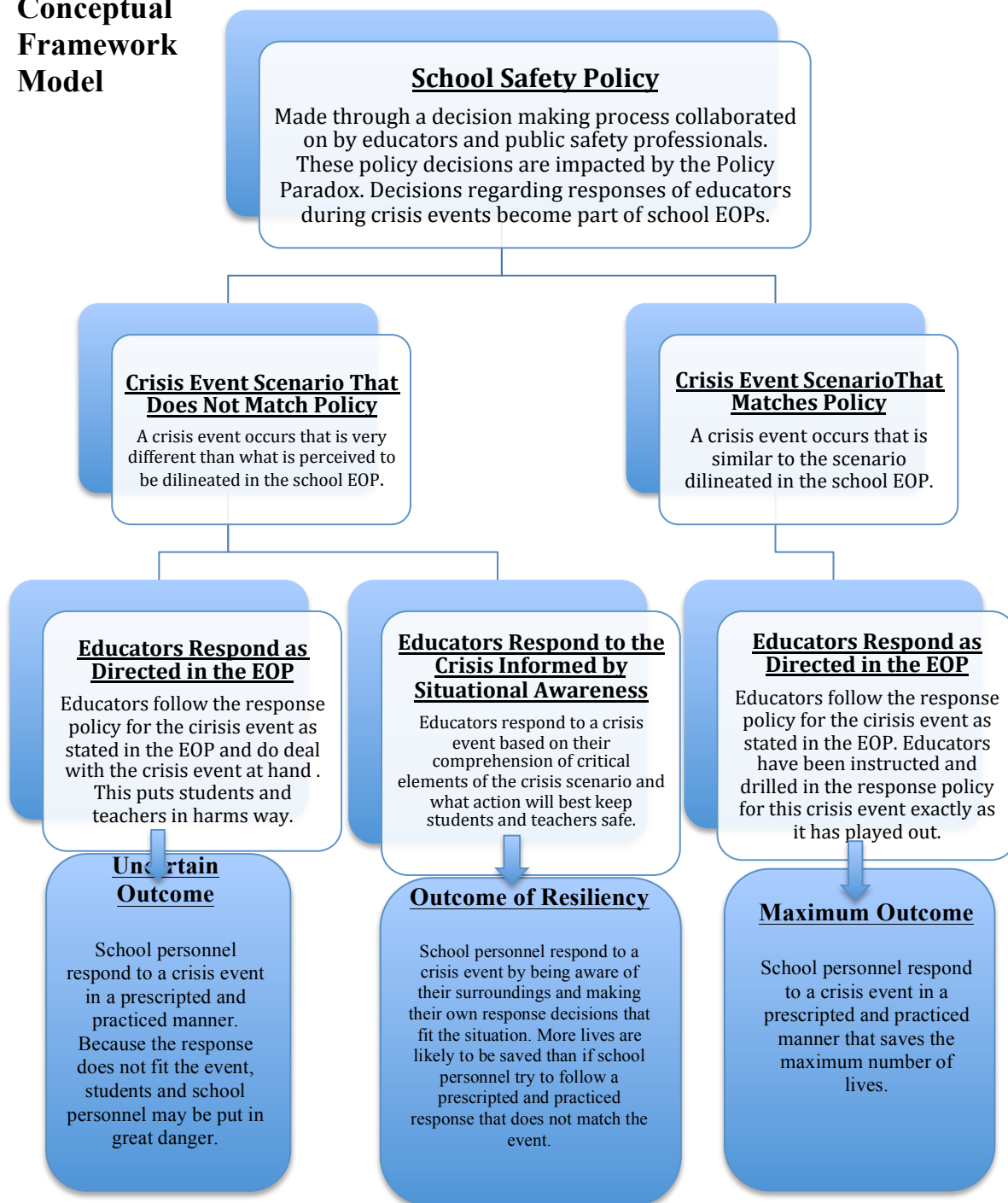


Figure 1. Processes by which the use of school safety policy informed by policy paradox, informed situational awareness, and resilience result in various outcomes for students.

Nature of the Study

The methodology for this research study was qualitative in nature. My goal was to gain a systemic, integrated, and overarching view of social arrangements and processes, as well as explicit and implicit rules. A multiple case study approach was used in this qualitative study. Yin (2014) discussed relevant situations for the use of the case study approach. Use of a case study approach is appropriate when researching how or why a phenomenon occurs, and the focus is on contemporary issues. Yin (2014) explained that case study methodology does not require the researcher to control behavioral events. The research questions of the study were intended to answer questions regarding how certain political goals and values influence a decision-making process. With the rise in school massacres, the subject of active shooter events is a contemporary issue.

Data was collected through face-to-face interviews with three school district members and one public safety professional from three school districts that have adopted an options-based response to an active shooter event in their EOP. In addition, EOPs were analyzed as well as federal, state, and local requirements for EOPs. Using the policy paradox, situational awareness, and resiliency conceptual framework, an explanation building data analysis strategy was used to find patterns, connections, and themes within the data that was collected from the interviews.

Definitions

Active shooter: An active shooter is an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearms and there is no pattern or method to their selection of victims (Steam, 2008).

Active shooter event: An unpredictable situation that evolves quickly in which an active shooter threatens the safety of the people in his or her path (DHS, 2008).

Alert: An initial alert may be a gunshot. Further alerts should be intended to make people aware of an active shooter on the premises. Alerts can be made over a public announcement system using plain and specific language avoiding code words (ALICE Training Institute, 2008).

ALiCE: Specific response to active shooter. A= Alert, L= Lockdown, i= inform, C= Counter, E=Evacuate (ALICE Training Institute, 2008).

All-hazards: Any incident or event, natural or human caused, that requires an organized response by a public, private, and/or governmental entity in order to protect life, public health, and safety, protect values, and minimize any disruption of governmental, social, and economic services (Blanchard, 2008)

Annex: Within the *Guide for Developing High Quality School Emergency Operations Plans* exists both functional annexes such as evacuation, lockdown, shelter-in-place, accounting for all persons, communicating and warning and family reunification. There also exist hazard specific annexes such as an active shooter annex (U. S. Department of Education, 2013).

Casualties: For the purposes of this dissertation, casualties refer to those who are killed or injured in a crisis event.

Concealed carry: The act of carrying a gun in a concealed manner with a permit from the state within which one resides.

Counter: As a last resort, a way to distract the shooter's ability to shoot accurately. It also involves moving toward exits while making noise, throwing objects, or adults swarming the shooter (ALICE Training Institute, 2008).

Crisis: A change, either sudden or evolving that results in an urgent problem that must be addressed immediately (Harvard Business Essentials, 2004)

Short period of extreme danger, an acute emergency. (Blanchard, 2008)

DHS: The Department of Homeland Security was established by President G.W. Bush in 2002 (Fagel, 2011).

Disaster behavioral response: For the purposes of this dissertation, disaster behavioral response will refer to those behaviors evident in response to a crisis event.

EOP (Emergency Operations Plan): An all-hazards document that specifies actions to be taken in the event of an emergency or disaster event and identifies authorities, relationships, and the actions to be taken based on predetermined assumptions, objectives, and existing capabilities (Federal Emergency Management Agency, 2008).

Evacuate: To run from danger when safe, using non-traditional exits if necessary. Rallying points should be pre-determined (ALICE Training Institute, 2008).

Fatalities: For the purposes of this dissertation, fatalities refer to those who are killed in a crisis event.

Federal Bureau of Investigation (FBI): An agency of the Justice Department responsible for investigating violations of Federal laws.

The Federal Emergency Management Agency (EMA): Established by President Carter in 1979, it is now a part of Homeland Security (Fagel, 2011).

Full scale exercise: A full scale exercise is an activity that simulates a crisis event as closely as possible. The exercise is designed to evaluate the capabilities of the EOP in a stressful environment that simulates actual response conditions. Such an exercise should coordinate the actions of several entities and test several emergency functions (Fagel, 2011).

Functional training exercise: A functional training exercise is a fully interactive activity that tests the capability of an organization to respond to a simulated event. The exercise is designed to test multiple functions of the organization's EOP (Fagel, 2011).

Hybrid targeted violence: An intentional use of force to cause physical injury or death to a specifically identified population using multifaceted conventional weapons and tactics (Frazzano & Snyder, 2014)

ICS: A standardized organizational structure used to command, control, and coordinate the use of resources and personnel that have responded to the scene of an emergency. The concepts and principles for ICS include common terminology, modular organization, integrated communication, unified command structure, consolidated action plan, manageable span of control, designated incident facilities, and comprehensive resource management. (Blanchard, 2008)

Inform: To communicate real time information on shooter location. It involves using clear and direct language with any communication (ALICE Training Institute, 2008).

Informed crisis response: Responding to a crisis event based on information received from the current environment and processing that information in order to make an informed response (Pauls et al, 2009).

Lockdown: If evacuation is not a safe option, entry points should be barricaded. Preparations should be made to Evacuate or Counter if necessary (ALICE Training Institute, 2008)

Traditional school lockdown procedures use the following instructions:

1. If one hears, “Lockdown” over the intercom or an administrator announces the lockdown in person:
 - a. Everyone is to stay where they are.
 - b. Classroom teachers are to:
 - I. Quickly glance outside the room to direct any students or staff members in the hall into their room immediately.
 - II. Lock their doors.
 - III. Lower or close any blinds.
 - IV. Place students against the wall, so that the intruder cannot see them looking in the door. Look for the “Safe Corner”.
 - V. Turn out lights and computer monitors.
 - V. Keep students quiet

Mitigation: Mitigation refers to the actions taken to reduce or eliminate long-term risk of hazards to people and property (Fagel, 2011).

National Incident Management System (NIMS): The NIMS identifies multiple elements of unified command in support of incident response. These elements include developing a single set of objectives, using a collective, strategic approach, improving information flow and coordination, creating common understanding of joint priorities and restrictions, ensuring that no agency's legal authorities are compromised or neglected, and optimizing the combined efforts of all agencies under a single plan (Blanchard, 2008).

Mass school shooting: A shooting in which four or more people are killed in a single incident (not including the perpetrator), typically in a single location (Fullman, 2012).

Options-based response: A response to active shooter event that gives victims options for responding to the crisis at hand, such as evacuating, locking down, alerting others, or counter attacking (ALiCE, 2008).

Perpetrator: For the purposes of this dissertation, a perpetrator is a person committing an act of violence.

Preparedness: Preparedness refers to emergency operations planning that focuses on responding to and recovering effectively from any hazard (Fagel, 2011).

Prevention: Prevention refers to the capabilities necessary to avoid, deter, or stop an imminent threat or mass casualty incident (US DOE, 2013).

Public safety professionals: For the purposes of this dissertation, public safety professionals refer to personnel involved in law enforcement, fire protection, and emergency management.

Policy paradox: The policy paradox is a theory of political decision-making that asserts politicians believe they should make decisions based on knowledge and scientific facts; however, politicians acknowledge there are other goals that impact those political decisions (Stone, 2012).

Recovery: The final phase in an EOP, the goal of which is to return the system and activities to normal (Fagel, 2011)

Resilience: Resilience refers to the ability to successfully adapt to stressors such as crises and trauma. It means maintaining psychological and physical well-being in the face of adversity. Resilience also means having an ability to recover from difficult experiences. It is not a trait that people either are born with or are not. It involves behaviors, thoughts, and actions that can be learned and developed by everyone (United States Department of State, n.d.).

Response: Response refers to the way in which people involved in a crisis situation react to the emergency immediately, during, and after the crisis (Fagel, 2011)

Run-hide-fight: Run-Hide-Fight is a response to active shooter strategy that encourages people involved in such a situation to respond first by running out of the building if possible. If running is not possible, then the strategy encourages people to hide someplace safe from the shooter. If confronted face to face with the shooter, this strategy encourages the people to fight the shooter.

Safe house program: A community program in which there are designated safe houses where students can go to if they feel unsafe.

School district personnel: For the purposes of this dissertation, school district personnel will refer to all personnel employed by a school district and may be put in the situation of having to respond to a crisis event.

School watch program: A community program in which neighbors take turns watching the area around the school for criminal activity.

Situational awareness: Situational awareness refers to being aware of ones own surroundings, especially in a crisis. Further processing what that information means to for the near future along with what actions need to be taken. (Pauls, 2009)

School massacre: For the purposes of this dissertation, a school massacre occurs when a perpetrator enters a school intending to kill more than one victim and succeeds in creating four or more casualties.

Social-emotional learning (SEL): SEL is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions (CASEL, n.d.).

School resources officer (SRO): A SRO is a sworn law enforcement officer assigned to a school who also performs the duties of a law related counselor and educator (National Association of School Resource Officers, n.d.)

Table-top exercise: A table top exercise is a training exercise that informally analyzes a crisis situation in a stress free environment. It is designed to elicit constructive

discussion as participants examine a crisis event and resolve issues based on emergency operations plans (Fagel, 2011).

Take cover: For the purposes of this dissertation, take cover refers to the crisis response of sitting cross-legged up against a wall with one's hands over one's head.

Target hardening: The concept of target hardening is to display a strong, visible defense that will deter or delay an attack (Blanchard, 2008).

Threat assessment teams: A threat assessment team is a multi-disciplinary group whose purpose is meeting regularly and when necessary to support the school. The team tracks red flags over time, detecting patterns, trends, and disturbances in individual or group behavior (US Department of Education, 2013).

Vulnerability assessment: A vulnerability assessment is the process of identifying and prioritizing the risks and threats in a system (Fagel, 2011).

Assumptions

When participating in this research, school personnel and public safety professionals were asked to share information regarding processes, attitudes, and goals involved in adoption of a crisis response. It is assumed that school personnel and public safety professionals were honest and forthright in their discussions pertaining to their perceptions of these events. This assumption allowed the analysis of the data to render meaningful policies, processes, and training information to school district personnel planning for school safety.

Scope and Delimitations

In this study, I focused on the process of adopting an options-based response at those school districts where such processes had occurred. This focus was chosen to further the understanding of school safety planning and process. Although the lack of research on school violence has left a void, it is impossible for one study to address them all (Astor et al., 2009). I did not address the inclusion of school personnel who examined using an options-based response and ultimately continued with a lockdown response. Also, I did not deal specifically with the prevention of school shootings. However, many aspects of this study may be readily transferable to fill other gaps in the research on school safety.

Limitations

I am cognizant of two biases that could influence this study. Having been an educator in many capacities in the last 35 years, I must be aware of any opinions I may have regarding school processes. In addition, I am a certified ALiCE instructor. As such, I have strong beliefs about the use of an options-based type of response to an active shooter event. I must remain cognizant of any biases this may present in my findings regarding attitudes, processes, or training of active shooter responses. In order to enhance subjectivity on my part, I discussed my results with two skilled professional Certified Emergency Managers (CEMs) and two long-time education professionals. It was intended that these professionals would point out any bias I may have brought to the interpretation of the results.

A revealing manner in which to collect data for this study would be to observe the actual decision-making process of adoption of an options-based response. However, finding enough districts that were geographically accessible and were currently participating in such a process would have been almost impossible. The cost and time taken to engage in these observations would have been prohibitive. Construction of the interview questions was designed to gather data that led to an understanding of the reality of the political process in each district.

Significance of the Study

School safety research has been lacking in the areas of stakeholder perspective, policy studies, evaluation of evidence-based programs, and studies that are transitional in focus (Astor et al., 2010). This study is transitional in focus while it relies on a political theoretical framework that gathers data from stakeholders. This study has most assuredly met the criteria to fill gaps recently established in the field of school safety (Astor et al., 2010).

Inasmuch as this study filled some gaps in the field of school safety, this study has created opportunities for continued research. Some of these opportunities include research on evidence-based programs developed to prevent school violence, research on schools that examined using an options-based response and ultimately continued with a lockdown response, and further study on teachers' responses to the inclusion of options-based responses.

The overarching idea of this study was to keep K-12 students safe from an active shooter event, giving this study the intent of positive social change. The consequences of

the results of this study are that education and public safety professionals will be prepared to keep the nation's most precious resource safe from harm. By enhancing the process of developing or changing EOPs in schools, there is an unstated hope that lives will be saved. This study emphasizes the benefits of collaboration between those representing schools and those serving the community. In addition, this study points out the desire by educators and law enforcement for educators to take responsibility for their safety and not depend solely on first responders. Teachers that are trained well regarding options for dealing with an active human threat will become empowered and believe that to do something is better than doing nothing.

Summary

The introduction to this study was a reminder that a safe learning environment is necessary for academic achievement and unfortunately, teachers and students must treat the scenario of an active shooter in their schools as a very real threat. The study at hand was introduced as a qualitative study that examined the processes, attitudes, goals, and training aspects of adopting an options-based response to an active shooter event in the school district EOP.

School shootings and resulting lives lost in the United States were discussed, along with the need for a prescribed response to an active shooter. A gap in school safety research was presented as discussed by Barrett, Jennings, and Lynch (2012) and Cornell & Mayer (2010). The problem statement pointed out that there has been an increase in mass school shootings and there have been student and teacher casualties and fatalities. A purpose statement noted that. In the long run, it is hoped that this may save lives.

The conceptual framework for this study was the combination of the theory of the policy paradox in political decision-making, the concept of informed crisis response through situational awareness, and the concept of organizational and individual resilience. These concepts work together to describe the policy-making decision process of K-12 schools in preparing for emergency operations and the reality of responding to actual crises in a school environment. The theory of policy paradox explains the efforts by educators and public safety professionals to develop policies with the use of knowledge and scientific information that are also impacted by many community goals. Informed by an actual crisis event, such as an active shooter, individuals or organizations may choose to respond in a manner contrary to policy based on situational awareness of the event. The concept of resilience steps in when individuals or organizations can make an informed crisis response to save the lives of school personnel and students.

The definitions of key concepts and terms can be found in this chapter. Assumptions, scope and delimitations, and limitations were all discussed in this chapter as well. Saving lives was the overarching significance of the study, along with emphasizing collaboration between stakeholders, encouraging schools to take responsibility for their safety, and empowering teachers to make safety decisions.

In Chapter 2, I will explore previous research on school safety and school achievement, the lockdown response versus an options-based response, as well as community collaboration and school safety. The conceptual framework will be explained in further depth, and the gap in the literature will be delineated. Government regulations

and suggestions for responses to active shooters in school environments will also be explored.

Chapter 2: Literature Review

School safety and student achievement have both been priorities for school personnel; however, with the increase in mass school shootings, school safety has become a necessity (Cornell & Mayer, 2010). On any given school day, there are approximately 75 million students attending school across the United States (National Center for Education Statistics, 2014). It is a concern for federal, state, and local governments, as well as school personnel that each one of those students remains safe from all hazards. The increase in active shooter events in the last two decades has heightened the level of awareness and concern for K-12 school personnel across the U. S (Bonnano, 2014). Federal, state, and local government agencies varied in their required and suggested prevention, response, and mitigation policies when dealing with active shooter events in K-12 schools (McCallion & Skinner, 2012). Varying levels of government with diverse agendas and purposes lead to many different processes for determining policies for active shooter responses in K-12 schools (McCallion & Skinner, 2012).

Safety during an active shooting event in a school is a concern, not only for school personnel, but for public safety professionals, policymakers, parents, and concerned citizens (Jennings, Khey, Maskalay, & Donner, 2011). Efforts to prevent and prepare for active shooter events have led many school districts to adopt strategies that included changes to EOPs, infrastructure, and everyday routines (Jennings et al., 2011). Some of these measures included delineated responses to active shooter events in EOPs, threat assessment teams, collaboration with first responders, security cameras, one-way

locks on inner doors, fortification of outer doors, and changes in visitor sign-in routines (Jennings et al., 2011).

The purpose of this qualitative multiple case study was to describe the decision-making processes used by school district personnel and the attitudes of school district personnel and public safety professionals when approving the inclusion of options-based responses to active shooter events in EOPs. This chapter addresses the importance of learning in a secure environment and the impact such an environment has on academic achievement. This chapter will describe an options-based response to an active shooter and how it differs from a lockdown response to an active shooter. Government requirements and suggestions are delineated as the chapter discusses the ways in which secure learning environments are threatened with the increase in active shooter events at K-12 schools. A gap in the literature will become apparent as policy paradox, situational awareness, resilience, community collaboration, and school policy studies are directly linked to the need for this study.

Literature Search Strategy

It was necessary to use a diverse approach when searching for literature on the topics of school safety and achievement, mass school shootings, active shooter events, school policy, resilience, situational awareness, options-based responses to active shooter events, and lockdowns. Due to the relative newness of these topics, in addition to the use of Google Scholar for peer-reviewed articles no older than five years, I also incorporated books and presentations in my literature review. I used government documents and interviews to gather background information for my research. With my chairperson's

permission, I included television and newspaper articles to gather information regarding mass school shootings.

Political Decision-Making in Schools

The key to understanding traditional political decision-making theory goes back to 1787 when the nation's forefathers developed. The United States Constitution and believed that making decisions regarding national policies was as simple as identifying objectives, identifying alternative courses of action for achieving the objectives, predicting the possible consequences of each alternative, evaluating the possible consequences of each alternative, and selecting the alternative that maximizes the attainment of objectives. This model is known as the rational model, and it assumes that policies are made by gathering information necessary for making informed decisions (Stone, 2012). Unfortunately, such a model ignores the decision maker's emotional feelings, moral attitudes, human motivations, and other life experiences.

According to Dumitriu and Hutu (2014), a recent study of school shootings indicated when developing policies regarding prevention of and preparedness for an active shooter event, policy makers should require schools to include a plan for an active shooter response in school EOPs. Such a plan should include communication channels with media, police, fire and EMT, require specific response responsibilities to specific school personnel require at least two full-scale active shooter drills per school year, and require school personnel and first responder cooperation in the development of all planning for an active shooter response.

Some public safety experts urge school safety policymakers to think beyond just an active shooter event and to plan for hybrid-targeted violence (Frazzano & Snyder, 2014). Hybrid- targeted violence (HTV) is intentionally causing injury or death to a population that has been specifically identified with the use of multifaceted tactics and conventional weapons (Frazzano & Snyder, 2014). Some examples of such attacks are as follows:

Frazzano and Snyder (2014) called for a paradigm shift in response planning and a need for public and school policies to embrace strategies that will include prevention of and preparedness for HTV. As mass school shootings increase across the United States, HTV increases throughout the world. Policies must be put in place before and not after the next HTV attack.

One attempt at curtailing violence in schools and protecting students was to develop policies regarding school resource officers (SROs). With the increase in on-campus violence and mass school shootings over the last two decades, there was an increase in SRO policies (Council of State Governments Justice Center, 2014). By 2013, the majority of states had introduced bills mandating SROs and other law enforcement personnel in schools (Council of State Governments Justice Center, 2014). Policies regarding SROs highlighted ways in which law enforcement supported school personnel with emergency operations planning, crime prevention, threat assessment, incident response, and the mentoring of students (Council of State Governments Justice Center, 2014).

Immediately following the mass school shooting in Sandy Hook, Connecticut in late 2012, there was an outcry from some firearms advocates to arm classroom teachers and principals. Policy makers found themselves struggling with the development and implications of policies aimed at having guns in classrooms and other parts of schools on a daily basis. By 2013, 33 states had introduced more than 80 bills in state legislatures regarding the subject of arming school personnel (Council of State Governments Justice Center, 2014). There was great variance in the substance of these bills. However, many of the bills included the following measures:

Of the 80 bills that were introduced, only Kansas, South Dakota, Tennessee, and Texas passed statewide legislation that allows school personnel to carry guns in schools (Council of State Governments Justice Center, 2014). Alabama's Franklin County passed similar legislation (Council of State Governments Justice Center, 2014).

A federal policy developed in 1999 by The U. S. Departments of Education, Health and Human Services, and Justice was a response to a series of deadly shootings in schools (Substance Abuse and Mental Health Services Administration [SAMHSA], 2013). The goals of this policy initiative were to target mental, emotional, and behavioral student health and help students to learn and feel safe in their schools (SAMHSA, 2013). This initiative was named Safe Schools/Healthy Students (SAMHSA, 2013). The initiative included five interconnected parts: safe school environments and policies, substance use, violence prevention, and early intervention, school and community mental health services; early childhood social and emotional development, and supporting and connecting schools and communities (SAMHSA, 2013). A study of this initiative

revealed that fewer students witnessed violence and were involved in incidents of violence. Students and teachers felt safer in their schools, and they felt that the community surrounding the school had become safer (SAMHSA, 2013). The funding for this initiative ended in 2013 (SAMHSA, 2013).

It is impossible to make accurate policy decisions regarding active shooter events due to the lack of theories regarding why violence happens in schools (Rocque, 2012). Rocque (2012) pointed out in studies of mass school shootings since the mid-1900s, attacks have increased, are often unique, and only sometimes share certain elements. Not having any patterns in the research makes policy planning for the prevention of and preparedness for an active shooter event difficult (Rocque, 2012). More research must be attempted on this topic prior to making firm policy decisions (Rocque, 2012). For these reasons, many school districts lack the necessary information to approach policy decisions regarding active shooter events.

During New York City's attempt at making schools safer, only one of the policy changes that were made was a slight attempt at preventing an active shooter event. However, school crime in New York City schools did decline over an 11 year period (Ayoub, 2013). The five major policy responses were:

1. An expanded collaboration between the New York City Department of Education and the New York City Police Department (Ayoub, 2013).

2. The Impact Schools Initiative – Targeting those schools with high crime and assisting them with changes in school culture, safety protocols, and student support services (Ayoub, 2013).
3. Changes to the discipline code and a more progressive response to discipline (Ayoub, 2013).
4. The Respect for All Initiative - a district-wide effort to promote respect for cultural diversity and to extinguish bullying, discrimination, and harassment (Ayoub, 2013).
5. Expanded School Safety Technologies (Ayoub, 2013).

There is also the possibility that policies such as those seen in New York City and policies that have been implemented specifically in response to active shooter events are harming students in ways that were not anticipated. Muschert, Bracy, and Peguero (2014) have described what they have coined “The Columbine Effect”. “The Columbine Effect” occurs when policies are developed in order to combat active shooter events, such as student surveillance, zero tolerance policies, the use of law enforcement to deal with normal student misbehaviors, and metal detectors at the schoolhouse door and has a profound effect on students (Muschert, Bracy, & Peguero, 2014). The effect can be one that makes students feel fearful, depressed, and unattached to their school (Muschert et al., 2014).

Although, there has been research on school policy surrounding active shooter events in schools that helped to inform my research, none of the policy studies focused directly on the development of school policies regarding options-based response to active

shooter events. The literature review was unable to find school policy research that focused on options-based responses to active shooter events. Much of the research claimed the important need for further research in the area of policymaking regarding active shooter events in schools.

Conceptual Framework

The Theory of Policy Paradox in Political Decision-Making

The paradox behind political decision-making lies within the concept that there is an agreement among policymakers that policies should be made through the use of knowledge and scientific data (Stone, 2012). However, there is an understanding among policymakers that, in addition to knowledge and scientific data, policymaking is impacted by various political influences (Stone, 2012). The theory of policy paradox starts with every policy issue having a goal, a problem, and a solution (Stone, 2012). The theory goes on to explore the many social influences within each of those categories that can transform goals, problems, and solutions (Stone, 2012). For the purpose of this research, the results were analyzed through the view of the framework of social influences created by goals of the policymakers participating in the study.

Goals. Goals do not refer to the goal of each policy, but to the goals and values of the communities having been served by the policymakers (Stone, 2012). These have been the standards most often used when policymakers enter into policy debates (Stone, 2012). Goals fall under the categories of equity, efficiency, welfare, liberty and security. When the goals are stated in an abstract manner, the community and policy makers are all in favor of the same goals. However, the discourse begins to occur when groups in the

community start to define the goals and the issues to suit their needs. Hot-button issues such as justice, democracy, and community often fall under the category of one of these goals. Issues of discourse often center on conflicting conceptions of the same goal or value. It becomes important that these underlying misconceptions are clarified so that the group can begin to understand the presenting differences and move toward agreement. These goals or values will be the influencers that will impact the final decisions regarding the development of public policies. Stone (2012) points out that these goals are often used to justify the development of a policy or action taken by policy-makers and can even be used to justify the reason for no action taken.

Equity. Political conflicts in which equality is the goal are most often described as distributive conflicts (Stone, 2012). These conflicts focus on a fair distribution of the subject matter. The decision must be made as to who the recipients are, what items are to be distributed, and what process will be used in the distribution (Stone, 2012). For example, what counts as income when applying for financial aid? What is being shared? Are we sharing a pie or a whole meal? Who qualifies as a minority or a senior, and should those who qualify be rewarded with such a status? These are the questions that come up in conflicts regarding the political goals centering on equity in policy.

Efficiency. Efficiency has become an important way of evaluating public policies (Stone, 2012). Efficient organizations become the most accomplished with the minimum amount of resources. The social conflict within the goal of efficiency becomes the human risk at which the efficiency occurs (Stone, 2012). Who determines the maximum value that can be derived from the resources before there is a human consequence? Are the

tradeoffs always equitable? These are the questions that come up in conflicts regarding the political goals centering on the efficiency of public policies.

Welfare. Social welfare is something that the public usually agrees upon when defined as helping individuals and families in desperate need (Stone, 2012). However, the conflict around the goal of welfare appears when within policy there is a need to separate need from desire (Stone, 2012). The dimensions of needs are vast and have become a political boxing ring for politicians and welfare advocates (Stone, 2012). Are needs considered to be life, liberty, and the pursuit of happiness or the minimum requirements for biological survival? Are needs personal or relational, relative or absolute? These are the questions that come up in conflicts regarding the political goals centering on the welfare of citizens.

Liberty. Politicians have struggled with the definition of liberty throughout the existence of the United States (Stone, 2012). To meet the goal of liberty through the making of policy, policymakers must be attuned to whose liberty they are preserving (Stone, 2012). When preserving a group's liberty, are they inadvertently destroying a different group's liberty or the liberty of individuals? Politicians have struggled with the idea that it is impossible to preserve the liberty of everyone (Stone, 2012).

Security. The word security has come to mean safety in many areas of people's lives. The public has come to hope for security against terrorism, economic security, food security, cyber security, environmental security, and personal safety (Stone, 2012). One way politicians keep their constituents safe is by developing effective policies. Those policies have been influenced by scientific reports and intelligence information.

Politicians have also been influenced by the public's perception of safety and the way in which the media portrays crisis events (Stone, 2012).

The use of the rational ideal to make informed public policy is but a dream. The very nature of public policy being for the welfare of the people demands that using scientific knowledge alone cannot meet such a demand (Stone, 2012). Instead, public policy always has, and will continue to be, based on reason, information, emotions, beliefs, and other contributing factors that make constituents and policymakers human (Stone, 2012). This was an important aspect of my policy research.

Informed Response Through Situational Awareness

When responding to a crisis, such as an active shooter event, seconds count. Most active shooter events in schools are over within 10 minutes. Often, it takes law enforcement at least that long to arrive on the scene. It is for this reason that teachers must be considered immediate responders and must fully understand response capabilities.

The OODA Loop. A four-point process of decision-making that guides swift, effective, and proactive decisions, the OODA Loop model contains four stages (ALiCE, 2008; Van Horne & Riley, 2014).

1. Observe - gather information from as many available sources as possible (ALiCE, 2008; Van Horne & Riley, 2014).
2. Orient – evaluate the information gathered and use it to update the current phenomenon (ALiCE, 2008; Van Horne & Riley, 2014).

3. Decide – decide on a course of action (ALiCE, 2008; Van Horne & Riley, 2014).
4. Act – follow through on that course of action (ALiCE, 2008; Van Horne & Riley, 2014).

The first two stages of this loop, observe and orient, are unquestionably related to situational awareness. Every voluntary task that a human being engages in must go through the OODA Loop cycle. The task may be as easy as teeth brushing, or as difficult as avoiding a car accident.

To engage in teeth brushing, one observes the brush, toothpaste, cup, and sink. The person then evaluates how he or she will reach and use them. He or she decides to use them. He or she then brushes his or her teeth. Observing the toiletries and evaluating how they could be used is an example of situational awareness.

Avoiding a car accident happens much quicker, but in the same stages. One is driving down the highway and suddenly observes a truck stop quickly in front of her or him. He or she evaluates that information and realizes that he or she is going to hit the truck unless he or she drives onto the shoulder. He or she decides to take quick action to drive onto the shoulder and does so. Observing the truck stopping quickly, knowing he or she would crash into the truck, and realizing the only alternative was the use of the shoulder is also an example of situational awareness.

The continuous loop with which the OODA Loop operates is one that cannot be interrupted. Once the loop is interrupted, it must restart the process from the very beginning at the observe stage once again Consider the active shooter. He or she has his

or her finger on the trigger, he or she has observed a classroom of students at which to begin shooting. He or she has evaluated the group lockdown in the corner, and he or she has decided to act. However, instead of taking action, what if all of a sudden ten books flew at the perpetrator? Instantly the OODA Loop is broken. For the perpetrator to shoot, he or she must restart the OODA Loop process all over. By that time, the students in the classroom have started to evacuate or rendered the perpetrator harmless.

The OODA Loop, as developed by USAF Colonel John R. Boyd, is essential to the understanding of situational awareness in prevention and preparedness of active shooter events, both on the part of the victims and the perpetrators (Van Horne & Riley, 2014). Supporting educators in becoming better observers and evaluators of what they have observed will help them in all crisis situations, not just active shooter events at schools. A recent example of this can be seen in the movie theater shooting in Lafayette, Louisiana on July 24, 2015. Two high school teachers, Jena Meaux and Ali Martin, who were attending a movie where a gunman opened fire, used previously taught active shooter response techniques to keep themselves safe and to have likely saved several others in that theater (ALiCE, 2008). One teacher maneuvered her own leg being shot in order to save her friend from being shot in the head, while the other teacher reached for the fire alarm in order to engage first responders to the scene as quickly as possible (Banfield, 2015). By pulling the alarm, it interrupted the perpetrators plans, and he killed himself (Banfield, 2015). These teachers were observing the active shooter event and their immediate environment, as well as evaluating the best way to save each other's lives

and the lives of those in the theater. The fire alarm interrupted the perpetrator's OODA Loop.

The OODA Loop

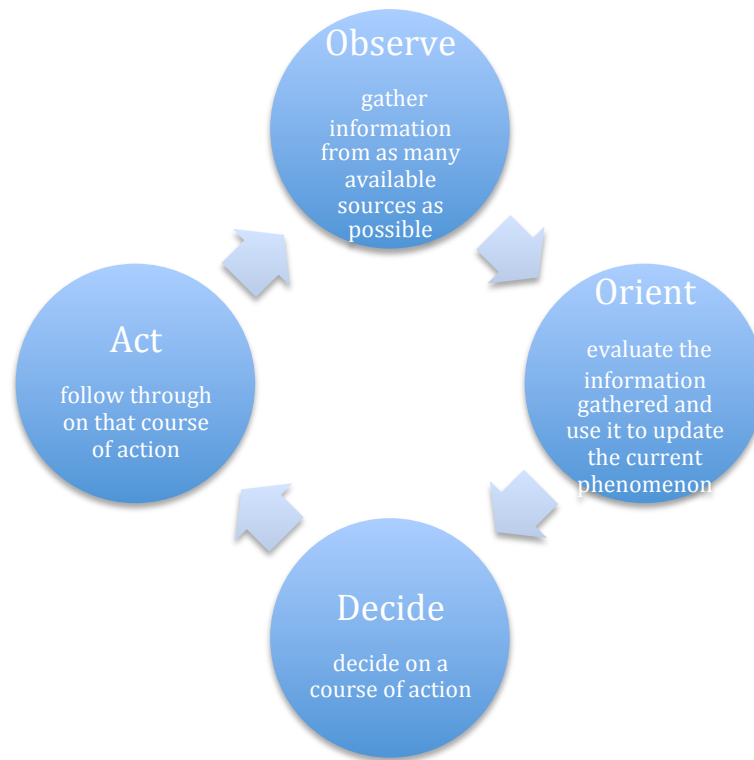


Figure 2. The OODA Loop. A four-point decision-making process integral to situational awareness (ALiCE, 2008; Van Horne & Riley, 2014).

Flash of Illumination. It was in 1926, in Wallas' *The Art of Thought*, that the first attempt to teach people to think more effectively appeared. (Klein, 2013). Through a series of preparation and incubation stages, Wallas (1926) believed that one would enter a stage of illumination resulting in the flash of illumination (Klein, 2013). Flash of illumination in today's terms might better be referred to as insight (Klein, 2013). For

nearly a century, man has realized the capabilities of insight as part of the human psyche and has sought to understand how insight works so that insight can be increased (Klein, 2013).

Triple Path Model of Insight. One explanation for the reasoning behind insights is that they become available through a triple path model developed by Gary Klein (2013). This model is a three-stage model that represents a trigger, an activity, and an outcome (Klein, 2013). Each of the three trigger areas activates the changing of the story that anchors one's thinking in a corresponding manner (Klein, 2013).

For the trigger of Contradiction, one would use a weak anchor to rebuild one's story. One would end up changing the way they act, feel, see or desire. For example, a police officer is driving alongside a brand new BMW. He glances over and notices the driver of the BMW, not only smoking in the vehicle but also discarding the butt of the cigarette by throwing it onto the passenger side floor of the vehicle. This scenario appears as a contradiction to the officer. Owners of new BMWs are not likely to treat their cars with such lack of respect. The officer pulls the car over to find there is indeed something wrong. The car has been stolen.

For the trigger of Connection, Coincidence, and Curiosity, one would use a new anchor to change one's story. This anchor would change the way one would act, feel, desire, or see. For the example of the trigger as a Connection, a well-known developmental psychologist, Alison Gopnik, was able to gain important insight from listening to her two-year-old son (Klein, 2013). Making a pineapple dessert for a dinner party, her son tried the dessert and made a terrible face. For weeks following, her son

would say to his mother, “pineapple yucky for me, yummy for you (Klein, 2013).” Until this insight, the psychological community thought that developmentally empathy did not appear until children were about seven years old (Klein, 2013). The connection Gopnik made to her son’s reaction to the dessert would be the beginnings of important research that would give new insights to the age of the development of empathy (Klein, 2013). A Coincidence is often thought to be nothing more than a chance occurrence to be ignored (Klein, 2013). However, it may well be a warning of an important pattern that may be about to change the face of medical history as in the case of Michael Gottlieb (Klein, 2013). After Dr. Gottlieb had encountered three patients with compromised immune systems he could have chosen to ignore them. Instead, he took that coincidence and looked for other patterns, eventually discovering the deadly pattern of AIDS (Klein, 2013). A trigger associated with a Curiosity can best be described as an investigation to find out what is going on (Klein, 2013). Such would have been the case with Alexander Fleming in 1928. During his study of the Staphylococcus bacterium, he carefully put his petri dishes aside for a month while he took his family on a vacation (Klein, 2013). During that time, some of the dishes got wet and began to mold. To his surprise, the moldy dishes showed no sign of the bacteria (Klein, 2013). This curiosity was the beginning of the discovery of penicillin (Klein, 2013).

For the trigger of Creative Desperation, one would discard a weak anchor so that one could change how they act, feel, desire, or see. Creative desperation can best be described as finding one’s way out of a trap that seems inescapable. Creative desperation is exactly what took place August 5, 1949, at Mann Gulch, Montana during a wildfire

(Klein, 2013). Smokejumpers who became trapped while fighting the fire lost 12 of the smokejumpers (Klein, 2013). Only three survived. The three that survived did so because one of the smokejumpers did something no one had ever done until that day (Klein, 2013). He started another fire. As the one fire raced toward them, the fire he started raced ahead of them, leaving a path that the fire behind them was unable to follow as it was void of material to burn (Klein, 2013).

Whatever the trigger, situational awareness played an important part in each of these scenarios. Each individual was confronted with a trigger and responded to that trigger. Had any of the individuals chosen not to use situational awareness and chosen to disregard the trigger, a different scenario would have had a very different outcome. The following figure illustrates Klein's (2013) triple path model of insight.

Triple Path Model of Insight

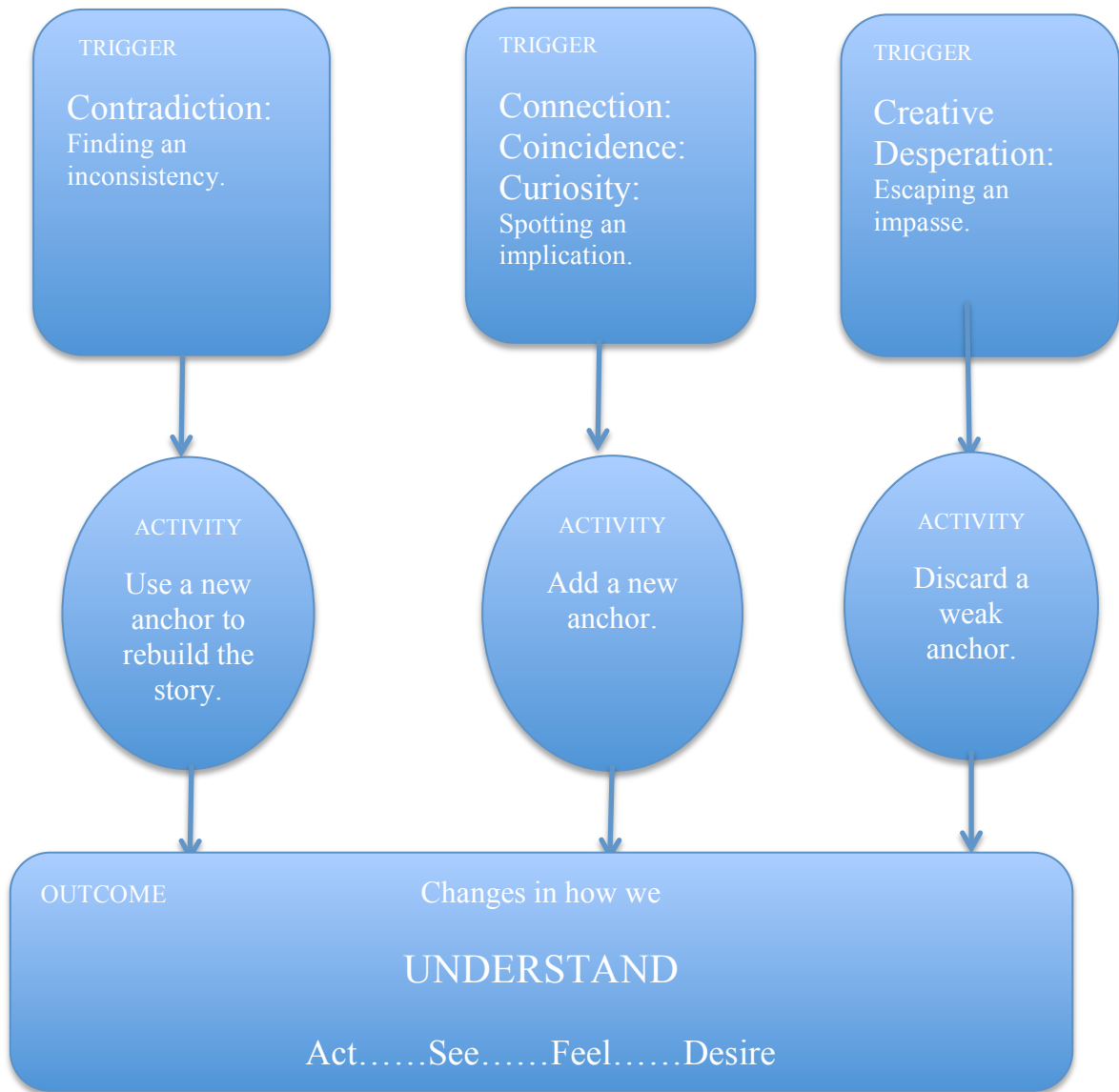


Figure 3. The Triple Path Model. An explanation for reasoning behind insight (Klein, 2013).

Puzzles and Mysteries. Puzzles are easily solved by gathering and analyzing data (Klein, 2013). The task is as simple as completing a jigsaw puzzle or a mathematical equation. Mysteries, on the other hand, are much more complex (Klein, 2013). Within a mystery, there is information that is yet unknown.

Situational awareness in a crisis is much closer to a mystery than a puzzle. A person has very little information about what is going on around him or her. He or she has the immediate environmental information and his or her experience, whatever that may be. The mystery must be solved quickly and efficiently risking as few lives as possible. During an active shooter event, students' and teachers' lives are dependent on educators having the tools to gather important environmental information and analyze that information according to learned experiences so that they can quickly solve the mystery.

Gut Reaction vs. Informed Response. According to empirical research conducted in the past five years, intuition is more than just a gut reaction. According to research conducted by Betsch and Glockner (2010), intuitive and analytical processes are components that happen together. It may appear to be a gut reaction due to the quickness in which the decision was made, however, the same environmental information was gathered, and the same analytical processes occurred. Morsella and Bargh (2010) put forth a theory that views intuition as nothing more than an atypical action related process of the conscious. For some time, psychologists in the late 20th century viewed intuition as an atypical brain process conceived by the unconscious mind. Morsella and Bargh (2010) theorized that the only output that came from the unconscious was involuntary life

supporting behaviors. All other outputs were from the conscious brain. Intuition is ever impacted by how one changes and learns (Myers, 2010). The experiences brought to an event in which situational awareness is used will always affect one's judgment (Myers, 2010). Hammond (2010) theorized that the term intuition should be eliminated altogether. Hammond (2010) viewed the word as an empty term that should be replaced with quasi rationality. In Hammonds (2010) research, he pointed out that intuition was a form of continuous analysis leading to rational thinking. He felt this term more accurately described what was happening as a cognitive skill that could be taught and could save countless lives.

A Skill, Not an Ability. Simply put, situational awareness can be defined as the skill of observing one's surroundings and making evaluations about what one has observed (Van Horne & Riley, 2014). This skill is not an ability that one is born with (Van Horne & Riley, 2014). Understanding how to use situational awareness most effectively in one's everyday life is a skill that one can learn (Van Horne & Riley, 2014; Klein, 2013). People can be taught to be more observant of their surroundings and to look for contradictions, connections, coincidences and curiosities (Klein, 2013). People can be trained in various responses so that when crises occur their psyche of experience can be illuminated along with their environment (Klein, 2013). Another word for being situationally aware is mindfulness. Mindfulness is a skill that makes one present in everyday activities (Van Horne & Riley, 2014; Klein, 2013). During this literature review there was no indication of research regarding school policy and how it was concerned with situational awareness in the case of active shooter events in K-12 schools.

The Concept of Organizational and Individual Resilience

The concept of organizational and individual resilience is one that is rarely considered in the development of school district EOPs, and yet has time and again been shown to be the saving grace when public policy, in the case of an active shooter, failed. When a crisis situation, such as an active shooter event, occurs at a school, there is usually a specific procedure set forth in the EOP for how the event is to be dealt with by teachers and students. However, as mass shootings have played out in the last two decades, policies crafted for responding to these active shooter events have not always proven to be lifesaving in nature. When such policies are rendered inadequate, organizations or individuals have taken it upon themselves to act in such a fashion as to keep students safe from the ensuing harm. Despite what policy-makers have put into place, for those dealing with a crisis event, resiliency becomes the immediate priority for themselves and for others whom they may be responsible.

A Global Definition. In the very basic sense, resilience, according to Merriam-Webster (2015) can be defined as, “an ability to recover from or adjust easily to misfortune or change.”

Other definitions that might be considered would be the definition used by United States Department of State (What is Resilience? n.d.) that explains resilience in this manner:

Resilience refers to the ability to successfully adapt to stressors, maintaining psychological well-being in the face of adversity. It’s the ability to “bounce back” from difficult experiences. Resilience is not a trait that people either have or don’t have. It involves behaviors,

thoughts, and actions that can be learned and developed in everyone.

Moore (2013) describes resilience as the process of responding more positively than expected after facing risk. Moore goes on to explain that resilience should be measured by how one reacts to a crisis event using his or her abilities and other environmental supports. However, the definition that most closely expresses resilience as it is discussed in this study would be Holling's (1973) definition as it is discussed by Cummins and Woodin (2013). Holling viewed resilience as the ability of a system to overcome its environment or surroundings to survive.

A Skill or An Outcome? According to Almedom (2013), resilience is the outcome of the process of survival. Rosen and Glennie (2010) agrees that being resilient is the outcome of having coped with some adversity. Rosen and Glennie (2010) believed that the skills lie in the coping, not in the resilience. In Rosen and Glennie's review of the literature, she found that the coping skills of self-reliance, hopefulness, and optimism fostered resilience. Resilience is also viewed as a skill or ability. Ripley (2008) describes resilience as a precious skill that saves lives. Ripley (2008) points out that along with having the skill of resilience come three underlying advantages:

1. A belief that one can influence life events.
2. A tendency to find meaningful purpose in the turmoil that life brings.
3. A conviction that one can learn from positive and negative experiences.

In their definition of resilience, The United States Department of State (n.d.) claims that resilience is an ability. They point out that people with this ability can adapt to stress, crises, and trauma. According to the many experts and scholars, resilience is both a skill and an outcome. It is an ability that must be enhanced for the survival of all people, and it is the ultimate outcome toward survival.

Calculating Risks. Individuals and organizations promote resiliency by accurately determining risk, whether in a long-term or immediate situation. Moore's (2013) research on homeless youth suggests that children who are homeless are at great risk but can become more resilient when they have positive relationships with adults. Flynn's (2015) report describes that the infrastructure of the metropolitan area of New York is at great risk of failing. His research, following, Superstorm Sandy, has determined the infrastructure in this area to no longer be resilient. He warns that the infrastructure in other areas of the United States share a similar risk. As emergency managers strive to build resilience into their profession, one of their first tasks is early risk anticipation (Tveiten, Albrechtsen, Waero, & Wahl, 2012). As new technologies become available, emergency managers are using them in a constant manner to monitor, anticipate, respond, and learn (Tveiten et al., 2012).

Survival. Cummins and Woodin (2013) identify survival as the true nature of resilience. Throughout history, survival has been both an unconscious and conscious goal. Our need to survive facilitates how we think and what we do. Gilbertson's studies in the 1990s showed that people with smaller hippocampi are likely to have a more difficult time surviving a crisis (Ripley, 2008). In a review of studies regarding student's

coping skills and resilience, Glennie (2012) found that to survive several risk factors some students developed protective factors. These factors were not always desirable and did not always deal directly with the difficult situations they came from, however, they served the purpose of survival. Ripley (2008) describes Special Forces soldiers who go through Survival School and can dissociate from the crisis at hand and do their job in a rote and remarkable manner. Ripley (2008) also warns this can also be very dangerous. Should one be at the center of a crisis and need only to perform an easy task, dissociate instead of panicking may be a way to survive (Ripley, 2008). However, if one needs to perform a set of tasks that require detailed thought quickly, dissociation is problematic (Ripley, 2008).

Educating the Citizenry. There is one element of safety however, that has been proven again and again to cause resilience during crisis situations, and that is training (Ripley, 2008). Training saved 2,687 Morgan Stanley employees on September 11, 2001 (Ripley, 2012). Rick Rescorla was a hero on 9/11, not only for what he did that day but for what he did in the eight years leading up to the national disaster (Ripley, 2012). After the first World Trade Center bombing in 1993 Rescorla, the head of security for Morgan Stanley on the 73rd floor, decided that the employees needed to take responsibility for their own survival (Ripley, 2012). Rescorla started running trainings and drills (Ripley, 2012). Employees were trained to meet in the hallways between stairwells and, at his direction, go down the stairs, two by two to the 44th floor (Ripley, 2012). These surprise drills continued until all employees picked up their speed (Ripley, 2012). Even clients who were visiting at the time of a drill were asked to participate

(Ripley, 2012). Rescorla was not popular for these drills, but he didn't care (Ripley, 2012). He understood the importance of training and its effect on resilience (Ripley, 2012). On 9/11 he watched from Tower Two as the first plane hit Tower One (Ripley, 2012). He immediately grabbed his bullhorn and instructed the employees of Morgan Stanley to evacuate (Ripley, 2012). He did this even though a Port Authority announcement had instructed everyone in Tower Two remain on their floors (Ripley, 2012). Moments before the collapse of Tower Two Rescorla had successfully evacuated most all of the Morgan Stanley employees (Ripley, 2012). He was last seen on the tenth floor, heading up the stairs to retrieve 12 employees who had not gotten out yet (Ripley, 2012). Rescorla had trained the Morgan Stanley employees to be responsible for their own resilience (Ripley, 2012).

Included in Presidential Policy Directive Eight: National Preparedness is *The National Strategy for Youth Preparedness Education: Empowering, Educating and Building Resilience* (2013). FEMA, the U.S. Department of Education and the American Red Cross developed this strategy as a call to the Nation to educate youth about actions that can be taken them and their families to protect their well-being and that of their communities when disasters threaten or strike. With training such as this, our Nation's youth can help prepare for, respond to and recover from disasters. The educated youth of today can become the resourceful and resilient adults of the future (FEMA, 2013). Children experiencing trauma during a disaster are open to educational vulnerability, psychological vulnerability, and physical vulnerability (FEMA, 2013). By providing education regarding disasters, some of this vulnerability is removed (FEMA, 2013). The

three essential benefits from engaging youth in disaster education are empowered youth can help engage their families, their peers, and their communities in disaster readiness, youth are empowered through understanding risks and knowing protective actions and today's prepared children are tomorrow's prepared adults (FEMA, 2013).

A great example of youth preparedness education would be ten-year old U.K. schoolgirl Tilly Smith. Tilly was vacationing with her family in Thailand in December of 2004 (Ripley, 2008). As they play on the beach, the tide suddenly rushed out leaving fish flopping in the sand (Ripley, 2008). Tilly watched the water begin to bubble strangely, and the boats bob up and down (Ripley, 2008). Just two weeks earlier she had learned about tsunamis in class (Ripley, 2008). She had seen a video about a tsunami in Hawaii and immediately recognized what was happening (Ripley, 2008). She told her parents that the family needed to get off of the beach immediately (Ripley, 2008). The family raced to the hotel where they alerted the staff (Ripley, 2008). The staff cleared the beach, and it was one of only a few beaches in Phuket where no one was killed (Ripley, 2008). Resilience may have something to do with one's brain, but resilience depends more on one's training (Ripley, 2008).

Flynn (2011) a former Coast Guard Commander and one of the nation's leading experts on resilience pointed out the failure of the homeland security network to utilize citizens in the fight against terrorism. Flynn (2011) reminded us of the history of The United States in its use of fire brigades to put out fires and armies that have consisted of volunteers, not draftees. With the onset of the Cold War and nuclear secrets, the government began to enlist the help of its citizens less and less (Ripley, 2011). However,

Ripley (2011) reminds us that it was a T-shirt vendor that brought down the 2010 car-bombing attempt on New York's Times Square. It was also mere passengers and flight crew members that disrupted the suicide-bombing attempt aboard an Airline Flight on Christmas Day in 2009 (Ripley, 2011). Government officials underestimate the competence of the public, their ability to learn, and their need for survival (Ripley, 2011).

Three Concepts, One Framework

The review of literature of the Policy Paradox has revealed that policies written regarding public school safety are most likely to be impacted by goals of the school community or area community rather than information shared by law enforcement experts at all government levels. The review of the literature regarding situational awareness has shown it to be a skill that can be learned and used to protect oneself and those around one. Resilience works together with situational awareness in the struggle for survival. This literature review made evident that resilience is both an innate physical attribute and a skill to be learned and enhanced. This three- point framework sets the stage for the study at hand that intends to discover:

RQ1: What processes are used by school district personnel that lead to the adoption of an options-based response to an active shooter event becoming part of the EOP policy?

RQ 2: How political goals influence the adoption of options-based response to an active shooter event to become part of the EOP policy?

RQ 3: How are theories of informed situational awareness taken into account in the development of an options-based response to an active shooter event becoming part of the EOP policy?

RQ 4: How is the maximum outcome of resilience planned for in the development of an options-based response to an active shooter event policy?

However, when working with educators, one must consider one other element of crisis response in schools. This element is reflection-in-action. Reflection-in-action can be described as a teacher being engaged in a lesson, stopping in the midst of the lesson, reflecting on the lesson, and making necessary adjustments (Giaino-Ballard & Hyatt, 2012). Countless teachers have depended on this spontaneous, intuitive practice of judging the effectiveness of a lesson for centuries (Schon, 1983). The better trained the teacher is, and more experience the teacher has, the better the teacher is at reflecting-in-action (Giaino-Ballard & Hyatt, 2012). If teachers are already prepared to reflect-in-action in teaching situations, with training, they would be just as well prepared to engage in reflection-in-action during any crisis in a school safety situation. An educator's response based on informed situational awareness would lead to resilience in action. Inquiries must be made as to the training and procedural applications policymakers consider when making school safety policy, as it is clear from the review of literature this has yet to be studied. The following figure illustrates the bridge between an active shooter event and resilience.

Preparing for Resilience

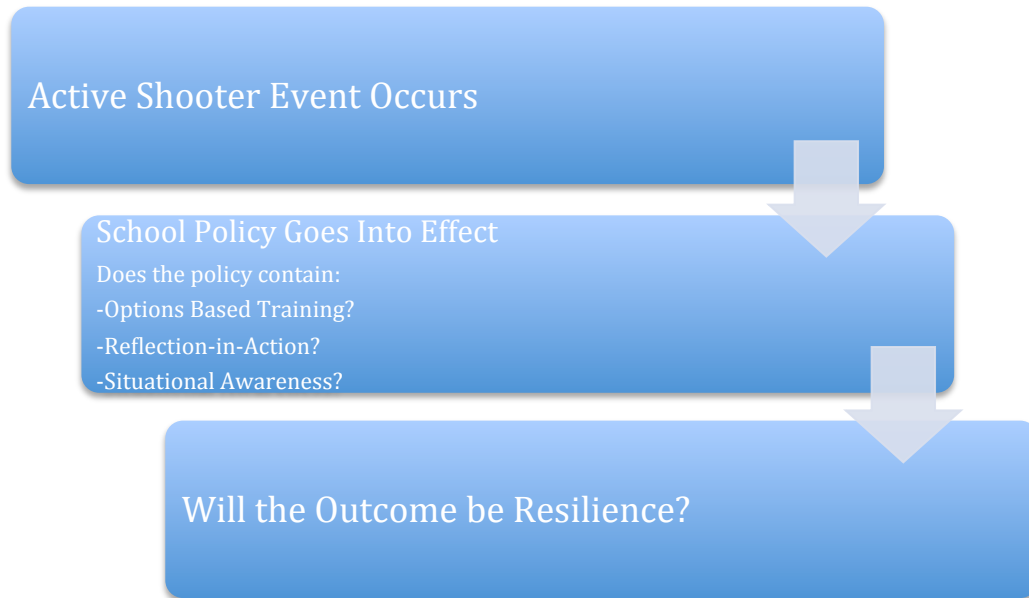


Figure 4. Conceptual framework for research. A summary of the research questions.

School Safety and Student Achievement

With the occurrence of any highly publicized school shooting, the public once again focuses on the idea that schools, in general, are becoming increasingly dangerous (Cornell & Mayer, 2010). What should be a more important focus is the link between school safety and student achievement. There has been a body of evidence for many decades that school disorder impairs learning and achievement (Cornell & Mayer, 2010). Recent bodies of research indicated a threat to school safety affected student achievement through diverse causal pathways (Cornell & Mayer, 2010). Studies were completed in all levels of K-12 schools and in all socioeconomic areas both urban and suburban (Cornell & Mayer, 2010). Direct and indirect events of school violence lead to low academic

achievement (Basch, 2011; McCoy, Roy & Sirkman, 2013; Cornell, Gregory & Fan, 2011). A study of high school students in Virginia found a direct link between school safety conditions and standardized achievement tests (Cornell et al., 2009). Low academic achievement was caused by student anxiety, fear, interruption in cognitive functioning, an inability to concentrate, and low student participation in class (Basch, 2011; McCoy, Roy & Sirkman, 2013; Cornell, Gregory & Fan, 2011; Steinberg, Allensworth & Johnson, 2011). In some cases, experiences or threats of school violence also lead to truancy, poor student attitudes towards school, a lack of student engagement, a low self-esteem, and depression (Basch, 2011; McCoy, Roy & Sirkman, 2013; Steinberg, Allensworth & Johnson, 2011; United States Agency for International Development, 2013).

Studies showed many similarities in teachers who felt insecure in the schools where they taught. There is a school of thought that recognizes teacher insecurities as a contributing factor to low student achievement (Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013).

Included in the aspects of some studies were the fear of violence not only from within the school but also the fear of violence from the neighborhood that surrounded the school. The fear of violence proved to have an encompassing impact on the low achievement of students who dealt with these threats on a daily basis (Steinberg, Allensworth & Johnson, 2011; McCoy, Roy & Sirkman, 2013).

Studies that compared schools academically based on school climate were notably similar when it came to academic rigor. The low achievement scores could be solely caused by

the unsafe school climate (McCoy, Roy & Sirkman, 2013). However, a meta-analysis of 213 school-based, universal social and emotional learning (SEL) programs involving 270,034 kindergarten through high school students showed significantly improved SEL skills as well as academic skills (Durlak et al., 2011). One of the attributes of an SEL environment is that students learn in a climate in which they feel safe (Durlak et al., 2011). In a study of teachers surveyed, teachers across the Nation felt that SEL had contributed to positive and safe school climates while academic achievement had improved (Bridgeland, Bruce, & Hariharan, 2013).

A study completed in the inner city of Chicago was more of a puzzle than a conclusion. It gave the appearance of “What came first? The chicken? Or the egg?” The results of this study indicated that the more violence there was at a school, the lower the student achievement (Steinberg, Allensworth & Johnson, 2011). At the same time, indicating that the lower the student achievement was at a school, the higher the school violence (Steinberg, Allensworth & Johnson, 2011). An additional study in Chicago conducted by the FBI on school shootings found four related school climate factors that contributed to the risk of experiencing a school shooting (Daniels & Bradley, 2011). The four identified factors included an inflexible culture, inequitable discipline, tolerance for disrespectful behavior, and a code of silence. Additionally, Daniels & Bradley (2011) indicated that schools that have averted a potential school shooting have addressed or rectified one or more of these school environmental factors.

Educators must be prepared to deal with the increase in active shooter events to fulfill the duties of providing a safe and secure learning environment in which students

can achieve to their academic potential. This study has provided foundational information toward resiliency of teachers and students during active shooter events that will in turn provide a safe and secure learning environment to enhance student learning.

Lockdown Response Versus Options-Based Responses

In the FBI's (Blair & Schweit, 2014) study of active shooter incidents in the United States, they describe an active shooter event as:

Active shooter is a term used by law enforcement to describe a situation in which a shooting is in progress [sic] and an aspect of the crime may affect the protocols used in responding to and reacting at [sic] the scene of the incident. Unlike a defined crime, such as a murder or mass killing, the active aspect inherently implies that both law enforcement personnel and citizens have the potential to affect the outcome of the event based upon their responses.

Lockdown Response

Following the Columbine shooting in 1999, policy makers included an active shooter response into their crisis plans. Typically, this was taking the action to lockdown.

A lockdown response consisted of the following:

1. Teachers would gather any students from hallways that were in close proximity to their classrooms and then lock the classroom door.
2. Any windows into the classroom would be darkened.
3. Students would gather in the corner farthest from the door and out of sight from the hallway.

4. Students would be instructed to be absolutely quiet.
5. Everyone would stay that way until law enforcement came to release everyone from the classroom.

There are many in the military or in law enforcement that believe lockdown to be the best response option available. However, some have found areas in which enhancements to this response may be important for the safety of students. In their research, Ergenbright & Hubbard (2012) concluded that the lockdown response could have been effective during an attack such as Virginia Tech, had the infrastructure been enhanced to include reinforced doors and locking mechanisms that were not vulnerable. In short, had the perpetrator not been able to breach the locked classroom door, the lockdown response would have been successful. In their article written for the FBI, Buerger & Buerger (2010), a former police chief and school administrator explain that the goal of the lockdown response is to minimize becoming a target for the perpetrator and maximize the ability of law enforcement to be able to confront the perpetrator. A lockdown response reduces the potential for casualties (Buerger & Buerger, 2010). In a chaotic environment of moving and screaming people, the perpetrator would be able to become camouflaged while he or she is provided many targets (Buerger & Buerger, 2010). Both experienced law enforcement and military personnel shared their beliefs that research suggests that at first contact with an active shooter, teachers and students should avoid the situation, seek a location where they can lockdown, barricade the entrances and wait quietly for law enforcement (Blair et al., 2013).

Options-Based Response

Following the shootings at Virginia Tech in 2007 and Sandy Hook in 2012 law enforcement, education, and emergency management officials began to seek out alternatives to the lockdown response to active shooter. In seeking out alternatives, the options-based response to an active shooter was initiated. An options-based response demands that an educator uses his or her best judgment to enlist the best opportunity to keep students and other school personnel safe in the case of an active shooter. Depending upon the proximity of the shooter, classroom lockdown may be the best option available. However, the best option available may also be to evacuate the building and run to another building where students can hide from the perpetrator. There may be no time to do any of that and the only option left may be to fight off the perpetrator. Options-based responses are predicated on the idea that school personnel have been adequately trained and trusted to make effective decisions.

As authorities recognized the disadvantages of the lockdown response, educators began to clamor for a more active way to protect students. In 2010, there were discussions of teachers and students fighting back in the event of an active shooter. Stone (2010) discussed the advantages and disadvantages of students using their books to distract and injure the shooter to buy time for adults and law enforcement to intervene.

In 2013, several agencies, headed by The U. S. Department of Education and FEMA, published a comprehensive guide to developing high-quality emergency operations plans for schools. There is a heading, regarding responding to active shooters (U. S. Dept. of ED, 2013). Under this heading it is discussed that no active shooter

situation is the same and that the exact scenario cannot be predicted (U. S. Dept. of ED, 2013). The guide further suggests that drills will help school personnel to consider various options in the case of an active shooter event and cautions that more than one option may be necessary (U. S. Dept. of ED, 2013). The guide discusses alerting authorities and law enforcement, best practices for the option of running, best practices for the option of hiding, and best practices for the option of fighting (U. S. Dept. of ED, 2013).

Also in 2013, research was completed for the schools of the Archdiocese of Milwaukee to gather best practice information regarding response to an active shooter event (Mascari, 2013). The purpose of this research was to develop a training model for the schools of the Archdiocese of Milwaukee (Mascari, 2013). The research concluded that an options-based response was a more effective response to an active shooter event than a lockdown response, but was predicated on teachers being highly trained so that they had many options that they felt comfortable in from which to pull (Mascari, 2013).

Options-based responses have resulted in many variations of what teachers might be trained to use as options. Morris (2013), an emergency manager at a university, trained professors and instructors in Run-Hide-Fight and an enhanced lockdown response. She wanted them to have an array of responses to use in the event of an active shooter incident. The National Association of School Nurses (2015) endorses Run-Hide-Fight and an enhanced lockdown response as they feel it allows school personnel to choose the best course of action that will increase the likelihood of survival (Galemore, 2015). Deputy John Williams (2011) has coined the active shooter response options as Evacuate,

Evade, or Engage. These seem very similar to the Run-Hide-Fight options.

In 2001, a police officer, worried about his wife who was a principal, began to think about the dangers associated with the lockdown response (ALiCE Training Institute, 2008). To give educators more options for responding to active shooters he, with the help of his wife and another officer, developed the program known as ALiCE (ALiCE Training Institute,, 2008). The letters stand for:

A-Alert- notify as many people as possible within the danger zone that a potentially life threatening risk exists (ALiCE Training Institute, 2008).

L-Lockdown- secure in place, and prepare to evacuate or counter, if needed (ALiCE Training Institute, 2008).

i-Inform- continue to communicate the intruder's location in real time (ALiCE Training Institute, 2008).

C-Counter- interrupt the intruder and make it difficult or impossible to aim. Countering is a strategy of last resort (ALiCE Training Institute, 2008)).

E-Evacuate- remove yourself from the danger zone when it is safe to do so (ALiCE Training Institute, 2008).

ALiCE is the presently the only options-based active shooter response commercial program in the Nation (ALiCE Training Institute, 2008). The company is engaged in the training of trainers to return to their schools and train the school personnel in this options-based program (ALiCE Training Institute, 2008). Besides working with K-12 schools, higher education and law enforcement they have expanded into training and working with

workplaces, healthcare facilities, and places of worship (ALiCE Training Institute, 2008).

There was no empirical research available regarding options-based responses included in K-12 school policies. It is evident that the field of options-based response in K-12 school policies is wide open for research. To date, there have been only opinions and articles written by experts in the fields of law enforcement and the armed forces regarding options-based response. Not only has no one completed any empirical research on the subject, no one has looked at the topic from the point of view of educators.

Government Regulations and Recommendations

In 2011, President Obama signed Presidential Directive Number Eight (PPD8, 2011). The purpose of this directive was to strengthen the security and resilience of the United States of America (PPD8, 2011). Strengthening the security and resilience of the United States was to be accomplished through organized prevention and preparation in dealing with threats that pose great risk to the security of the Nation (PPD8, 2011). Several departments and agencies of the federal government became involved in this one directive (PPD8, 2011). This directive had many implications for schools across the country.

Prior to President Obama's directive, The Elementary and Secondary Education Act, as amended in 2001 already addressed school safety in two areas (McCallion & Skinner, 2012). The first was to prevent school violence and drug abuse (McCallion & Skinner, 2012). School safety was specifically addressed in ESEA Title IV, Part A, the Safe and Drug-Free Schools, and Communities Act (McCallion & Skinner, 2012). The second area was a provision related to students attending unsafe schools; this was the

Unsafe School Choice Option. Higher education facilities were also impacted by federal legislation when it came to Title IV laws (McCallion & Skinner, 2012). When it came to school safety, the Higher Education Act specifically required that schools benefitting from federal aid adhere to specific requirements regarding campus security and crime statistics (McCallion & Skinner, 2012). This legislative amendment became known as the Clery Act (McCallion & Skinner, 2012).

Following a school shooting, there is often an outcry for legislation that will prevent future school shootings (Schildkraut and Hernandez, 2013). This type of legislation is called “feel good legislation,” is most often aimed at gun control, and rarely makes it past the introduction phase (Schildkraut and Hernandez, 2013). Following the Sandy Hook tragedy, there was a great deal of effort made toward passing gun control legislation (Schildkraut and Hernandez, 2013). In the years since the Columbine shooting in 1999, tens of thousands of pieces of legislation have been introduced related to gun control, mental health, improved reporting of gun sales, and criminal justice related issues. Very few of these pieces of introduced legislation have been passed (Schildkraut and Hernandez, 2013). Schildkraut and Hernandez (2013) ponder if the intent of legislators is truly to make a change or is it just to make constituents feel better about the fact that something is being done.

Following the tragedy at Sandy Hook in December of 2012, the Committee on Education and The Workforce of the U. S. House of Representatives held a hearing on *Protecting Students and Teachers: A Discussion on School Safety in February of 2013*. The discussion included such topics as security equipment, mental health, emergency

operations plans, school climate, school resource officers. Experts in the field of school safety shared their knowledge of the subject with the committee. None of the experts ever discussed options-based response or lockdown response to an active shooter event. The testimony of the National Association for the Advancement of Colored People [NAACP] Legal Defense and Educational Fund was well researched and impactful. The NAACP discussed several points. Zero-tolerance policies and a police presence in schools have not made any meaningful improvements in school safety (Protecting Students and Teachers: A Discussion on School Safety, 2013). Building trust between students and teachers is the best way to prevent school violence (Protecting Students and Teachers: A Discussion on School Safety, 2013). Safe schools are essential for student learning (Protecting Students and Teachers: A Discussion on School Safety, 2013).

In March of that same year, the Senate introduced the *School and Campus Safety Enhancements Act of 2013*. This act would have provided elementary schools, secondary schools, and college campuses with the means to enhance their security and emergency equipment, plans, and training. The House of Representatives introduced a similar bill. After much discussion and several revisions, the bill was never enacted.

Also in 2013, the U. S. Department of Education, along with assistance from FEMA, FBI, DHS, the Department of Justice, and the Department of Health and Human Services, developed the *Guide for Developing High-Quality School Emergency Operations Plans*. This guide was originally developed in response to Presidential Directive Number Eight. However, the events at Sandy Hook had a great deal of influence on what was included in the section on active shooter response. The section on

active shooter response recommends an options-based response to an active shooter event in a school. The guide was organized into four main sections:

1. School emergency management planning.
2. Development, implementation, and collaboration of the school EOP.
3. Form, function, and content of the school EOP.
4. Specific topics such as active shooter, school climate, psychological first-aid, and communication.

The guide emphasized schools planning for prevention, protection, mitigation, response, and recovery. To provide assistance to schools needing help with the development of high-quality EOPs, the Department of Education created technical assistance center called Readiness and Emergency Management for Schools [REMS]. Not only did the website offer a great deal of helpful information regarding school EOPs and school safety, but the REMS team was also available for email or phone assistance as well as to provide in-person training at schools.

Following the guide on the development of EOPs, the U. S. Department of Education developed a resource guide on how to improve school climate and discipline. Within the guide, it is stated that the priority for all schools is to be safe and successful and that improving climate and discipline is a necessary part of making a school safe and successful.

Following the mass shooting at Columbine, states began to take a serious look at legislation regarding school emergency operations plans. Most states passed legislation regarding how and when emergency operations plans were to be written. In Illinois,

Public Act 94-600 of 2005 required that each school develop an EOP and that it would be reviewed annually. The participants required to be involved in the development and review of the EOP were a school board designee, the principal, a teacher union representative, a fire department representative, a police department representative, and an emergency medical technician representative. The EOP would be filed with the regional superintendent on a yearly basis. The law also required five yearly drills in each school. Three fire drills were to be conducted with students in which one of the drills should be conducted with the fire department in attendance. One tornado drill was to be conducted with students. One bus evacuation drill was to be conducted with students. There was one law enforcement drill mandated that may or may not be conducted with students. It was the law enforcement agencies responsibility to initiate the drill. The drill scenario could be a bomb threat, suspicious person, active shooter, or hazardous material. Following the Sandy Hook shooting in 2012, changes were made to the Illinois law with the passing of Public Act 098-0048 in 2013. The changes were specifically aimed at the law enforcement drill. Subsequently, the law enforcement drill had to be conducted with students, and it became the mutual responsibility of the school and law enforcement agency to schedule the drill. The drill scenario had to be specifically that of an active shooter event and fire departments, and emergency medical technicians had to be included.

Although, many states recommend school districts follow the recommendations of the *Guide for Developing High-Quality Emergency Operations Plans*, only Ohio

specifically recommends that their schools use an options-based response to active shooters.

Specific policies and recommendations could be found within individual school districts. Howard County in Maryland set up a task force in 2013 to make recommendations regarding school safety. Some of those recommendations went beyond the county they lived in:

1. Improve the physical security features of schools across the country.
2. Strengthen school security practices at all schools and ensure consistency across the school system.
3. Each school will ensure that all personnel are trained at least annually on its specific emergency response plan.
4. Non-school users of the school facilities must be familiar with each school's emergency plan.
5. Non-public schools need to have effective emergency response plans for their schools.
6. Ensure post-incident resources are available for survivors, victims' family members, police and emergency staff.
7. Ensure community recovery is considered in developing community emergency response plans.

In Canada, there are specific requirements and procedures for elementary school buildings regarding safety. However, in the secondary schools the Providence governments have made only recommendations as to what procedures and physical

security should entail. The Toronto schools depend highly upon their communities to participate in keeping students safe.

Out of the Sandy Hook tragedy came two reports. In 2013, the State's Attorney of Danbury Judicial District in Connecticut released a report that was completed as an investigation into the mass school shooting at Sandy Hook Elementary School on December 14, 2012. This report gave complete details of the shooting from the perpetrator's life and planning of the event to the actions of the teachers and students on the day of the shooting. The State's Attorney's conclusions included the following important remarks:

1. A motive could not be established (Sedensky, 2013).
2. The perpetrator had mental health issues that affected his ability to form relationships with others (Sedensky, 2013).
3. The perpetrator had a familiarity with and access to firearms and ammunition (Sedensky, 2013).
4. The perpetrator was obsessed with the Columbine and other mass shootings (Sedensky, 2013).
5. It is not known why Sandy Hook Elementary was chosen, other than the proximity to the perpetrator's house (Sedensky, 2013).

The Final Report of The Sandy Hook Advisory Commission was presented to Connecticut Governor Daniel P. Malloy in 2015. This report was an extensive and comprehensive study of measures that could be taken to keep teachers and students safe in school (Sandy Hook Advisory Commission, 2015). Using the incident at Sandy Hook

as a foundation, the commission came up with an extensive list of recommendations (Sandy Hook Advisory Commission, 2015). These recommendations were each classified under one of three categories, safe school design and operation, law enforcement, public safety and emergency response, and mental and behavioral health (Sandy Hook Advisory Commission, 2015). Some of the recommendations were made law by the Connecticut General Assembly, and others have been instituted for use in schools of other states across the Nation (Sandy Hook Advisory Commission, 2015). Under the category of safe school design and operation, the Commission recommends that a school safety committee is highly involved in the development of EOPs that fit well in their school, however, the commission never mentions options-based responses (Sandy Hook Advisory Commission, 2015).

Although, the federal government strongly suggests the use of options-based response to active shooter events, my literature review would indicate that only one state requires such a response through written policy. This study would bring further enlightenment as to whether or not options-based responses to active shooter events in K-12 schools should be considered by school districts when establishing safety policies.

An Increase in Active Shooter Events

Active shooter events in schools have increased over the last five decades, with each decade having one or more significant school shootings that have resulted in death and psychological trauma of the school and community (Bonanno & Levinson, 2014). In The National School Safety Center's 2010 Report on school-associated violent deaths, the center noted that school shootings accounted for 70% of violent student deaths in schools

(Dorn, Satterly, Dorn & Dorn, 2010). Shootings were followed only by stabbings at 14% (Dorn et al., 2010). The psychological traumatization caused by school shooting incidents has been felt far beyond the communities in which the shootings have occurred and have encompassed the entire Nation (Bonanno & Levinson, 2014). For the purpose of this literature review an active shooter event will be defined as “an occurrence where one or more individuals participate in an ongoing, random, or systematic shooting spree with the objective of multiple or mass murders” (Mitchell, 2013).

Valuable Statistics

Through the quantitative study of data surrounding active shooter events in educational environments important information has been recognized, especially the fact that both the number of active shooter incidents in the United States, as well as the number of casualties has increased over the past decade (Blair & Schweit, 2014). According to a study of active shooter events between 2000 and 2013 that was completed by the FBI, active shooter events having taken place in educational environments accounted for a quarter of the active shooter incidents during this time period and active shooter incidents taking place in K-12 schools accounted for two-thirds of that figure (Blair & Schweit, 2014; Kelly, 2012). According to that same study, active shooter incidents in educational environments have been responsible for some of the highest casualty counts (Blair & Schweit, 2014). Two examples of this are the events at Sandy Hook Elementary School that killed 26 and injured 2 and Virginia Polytechnic Institute and State University in which 32 were killed, and 17 were injured (Blair & Schweit, 2014). The majority of K-12 school shooter events took place in school classrooms or

hallways (Blair & Schweit, 2014). Most high school shootings took place on Mondays or Wednesdays (Blair & Schweit, 2014). Shootings at middle schools most often took place on Mondays, and shootings at elementary schools most often took place on Fridays (Blair & Schweit, 2014).

National active shooter data kept and analyzed by the New York Police Department shows evidence that there was an increase in overall active shooter incidents in the United States since 2000 and that attacks are becoming more dangerous with the number of casualties increasing, as well (Blair & Schweit, 2014).

The Perpetrator

Information that describes the typical active shooter tells us that in high schools and middle schools the active shooter has most often been a student or former student of the school (Lambert, 2013; Blair & Schweit, 2014). In elementary schools, the shooter has most often been an intruder (Lambert, 2013; Blair & Schweit, 2014). According to key findings from the study completed by the U. S. Secret Service, there is not one profile that accurately describes a school shooter (Bonanno & Levinson, 2014). However, most active shooters have, at one time, engaged in behaviors that have concerned others, and they have had difficulty coping with loss, failure, bullying or persecution (Bonanno & Levinson, 2014). Adults committed all mass violence incidents occurring in elementary schools between 1974-2012 (Lambert, 2013). However, for those mass violence incidents occurring in middle schools and high schools, students, ages 13 to 18 committed the majority of the incidents (Lambert, 2013).

The Active Shooter Incident

Mass violence incidents, those incidents attributed to any form of weapon intended to kill people, occurred at all K-12 levels, with 20% of the incidents occurring at the elementary level, 20% of the incidents occurring at the middle school level, and 60% of the incidents occurring at the high school level. Mass violence incidents have occurred in many different types of communities (Lambert, 2013). Urban communities have experienced 45% of mass violence incidents at schools, suburban communities have experienced 29% of mass violence incidents at schools, while small town/ rural communities have experienced 26% of mass violence incidents in schools (Lambert, 2013).

Between 1974-2013, all of the deaths in these incidents were attributed to shootings. Injuries were attributed 76% to shootings, 7% to stabbings, and 17% to explosives (Lambert, 2013). The explosives were attributed to one incident in Cokeville, Wyoming in 1986 (Lambert, 2013).

Most active shooter incidents last less than 15 minutes and end before police arrive (Bonanno & Levinson, 2014). The perpetrator has either committed suicide, been apprehended by school staff, or has left of his or her own accord within the time it took the police to arrive on scene (Bonanno & Levinson, 2014). This leaves school personnel wholly responsible for students and other school personnel during this period of the attack.

Mass Murder Attacks

Agnich (2015) and Satterly (2014) also remind us that not all school-based mass murder attacks fall under the category of shootings. It is true that these events are even rarer than school shootings, yet, any mass murder attack on innocent children and their educators needs to have plans in place for prevention and response. Some examples of other mass murder attacks were:

1. 1927 Bath Township, Michigan School Massacre –The main emphasis of the attack was on the bombing of the school and school officials outside of the school (Bernstein, 2009).
2. 1986 Cokeville, Wyoming – The main emphasis was on the explosion of gasoline bombs inside of the school to start a fire (Wixom & Wixom, 2015).
3. 2014 Murrysville, Pennsylvania – The main emphasis was on stabbing as many people as the perpetrator could possibly stab (CNN, 2014).

In a study conducted of relative risks of death in United States K-12 schools in 2014, it was pointed out that during the period from 1998 to 2012 fewer lives were lost in school shootings than were lost in school bus accidents (Satterly, 2014). When rating the top five risks of student deaths in K-12 schools the top risk was school transportation (Satterly, 2014). The second rated risk homicide, the third rated risk suicide, and the fourth rated risk was to unknown causes. Active shooter rated only fifth on the scale of relative risks of death in K-12 schools. Why then is so much time spent on the prevention and response to a fifth rated risk? Satterly (2014) believes it is foolish to do so. He believes time and

money would be better spent on saving lives preventing deaths on school transportation or homicides that occur near schools within inner city areas plagued with poverty.

Improving Survival

With the knowledge that most active shooter events last less than 15 minutes and are not stopped by intervention from law enforcement, leaders from the fields of medicine, law enforcement, fire/rescue, emergency medical services (EMS), first responders, and the military came together to discuss policies that would enhance survival of victims (Jacobs, et al., 2013). The response recommended by the conference is summarized in the acronym “THREAT” (Threat suppression, Hemorrhage control, Rapid Extraction to safety, Assessment by medical providers, Transport to definitive care) (Jacobs, et al., 2013). These recommendations had implications for schools as well. Administrators and teachers should know how to stop bleeding and do CPR.

With the multitude of statistical research on the increase in active shooter events in K-12 schools and the specifics of what is known and is not known about the attacks and the perpetrators, there continues to be very little research on how this information affects policymaking in the schools. The emphasis of current research continues to be focused on the active shooter event, the perpetrator, and ways in which law enforcement can be enlisted to prevent and protect schools from such attacks. Only recently have governmental entities, such as the U. S. Department of Education and the Ohio Department of Education, begun to envision school policy as a pathway to establishing responsibility and options-based responses for the protection of students and school personnel during active shooter events. The following graphics illustrate the increase in

school shootings and fatalities and injuries.

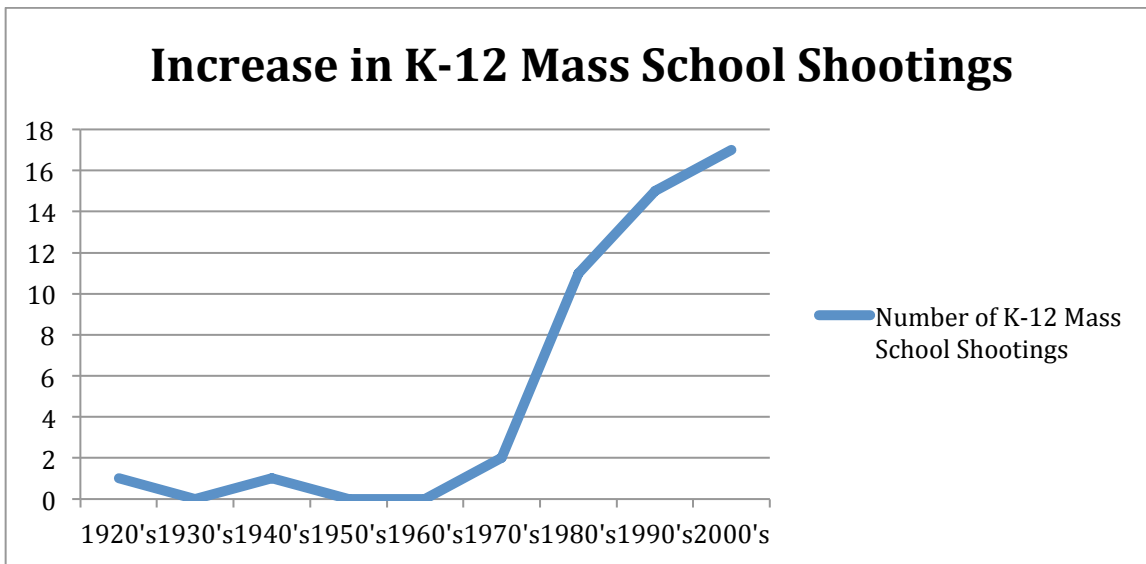


Figure 5. Mass school shootings in K-12 schools 1920-2009, according to the FBI definition of mass shootings, 2013 (Lambert, 2013).

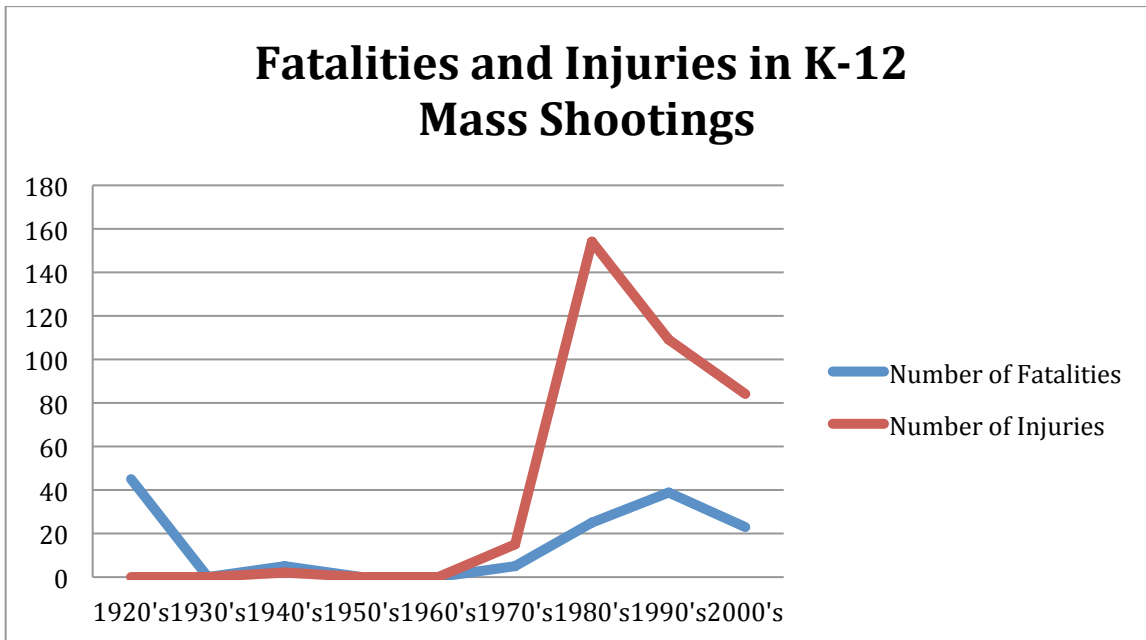


Figure 6. Fatalities and injuries in mass school shootings in K-12 schools 1920-2009, according to the FBI definition of mass shootings, 2013 (Lambert, 2013).

Community Collaboration on School Safety

The responsibility to keep students safe should not lie wholly with the school, but should be an effort pursued by the entire community. The community includes parents, businesses, secular organizations, school boards, educators, students, and first responders. When a community adopts a collaborative approach to school safety, focusing on prevention, protection, mitigation, response, and recovery, a safe learning environment can be provided for all students in the community.

The California Department of Education recognized the importance of collaborating with community members on school safety issues when they developed their guide to *Improving Collaboration on School Safety Issues* (Improving Collaboration on School Safety Issues, n.d.). The California Department of Education recommended that when educators are working with students they encourage and promote input and responsibility for safer schools among the students (Improving Collaboration on School Safety Issues, n.d.). The Department of Education also encouraged involvement in conflict resolution and restorative justice (Improving Collaboration on School Safety Issues, n.d.). When working with parents, the Department suggested inclusive, on-campus policies that give parents access to the schools and the staff (Improving Collaboration on School Safety Issues, n.d.). The Department recognized the many contributions that community residents without school-aged children could make to keeping schools safe (Improving Collaboration on School Safety Issues, n.d.). In an example, residents could be involved in “School Watch” programs or “Safe House” programs (Improving Collaboration on School Safety Issues, n.d.). According to the

California Department of Education, involvement with law enforcement should occur more than the required once a year, or more often than when there is an incident (Improving Collaboration on School Safety Issues, n.d.). School personnel and law enforcement should meet during regularly scheduled meetings to update each other on issues and intervention strategies, as well as safety successes in school and the community (Improving Collaboration on School Safety Issues, n.d.). There should be discussions on prevention techniques, and students should have the opportunity to interact with officers in a non-threatening manner (Improving Collaboration on School Safety Issues, n.d.).

The National Association of School Psychologists discussed best practices for creating safe and successful schools in their publication, *A Framework for Safe and Successful School Environments* (Cowan, Vaillancourt, Rossen, & Pollitt, 2013). The first best practice mentioned is to integrate services through collaboration (Cowan, et al., 2013). Cowan, Vaillancourt, Rossen, and Pollitt (2013) point out that when community-based service providers and school staff collaborate, safe and successful learning environments are facilitated. Integrated services lead to more sustainable and comprehensive school success that includes safety planning among many other collaborative efforts (Cowan, et al., 2013).

In the *Massachusetts Task Force Report on School Safety and Security*, collaboration and coordination are described as the key to effective emergency management in schools (Cabral, Malone, & Polanowicz, 2014). The report goes on to point out the importance of the district emergency management team members building trust among each other, and that in order to work collaboratively the members need to understand and respect each other's responsibilities (Cabral, Malone, & Polanowicz, 2014). For the emergency management team to remain an involved group

of leaders, the task force suggested that the team meet once a month (Cabral, Malone, & Polanowicz, 2014). The report delineates the district emergency management team as the school superintendent, emergency management director, chief of police, fire chief, and mayor (Cabral, Malone, & Polanowicz, 2014). The report further delineates the team's responsibilities to be communicating regularly with stakeholders and community members about aspects of school emergency management and providing guidance and directives regarding building-level emergency management to school, police, fire, and emergency medical personnel (Cabral, Malone, & Polanowicz, 2014).

Any community that strives to build resilience among the various parts of the community such as the schools must work to build resilience among the whole of the community through collaboration (Martin, 2015). To achieve a resilient community, the community must first define and nurture collaborative environments (Martin, 2015). This is especially critical prior to a crisis so that various elements of the community already have trusting relationships in which they understand each other's roles and responsibilities and can fully communicate (Martin, 2015). The community must also identify enablers and barriers to collaboration (Martin, 2015). The sharing of resources and training opportunities are an example of collaboration enablers (Martin, 2015). Communication difficulties might be considered a barrier (Martin, 2015). A community must also understand the people and factors behind collaborative efforts (Martin, 2015). So many times, within various levels of government, efforts toward crisis intervention appear to be redundant (Martin, 2015). A deeper understanding of each agency's mission would assist the community in their collaborative efforts (Martin, 2015).

One of the important attributes of a safe and academically productive school is a positive school climate (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Promoting a positive school climate is a strategy for enlisting family and community members to become part of safe and successful learning environments (Albright, Weissberg, & Dusenbury, 2011). When schools include social-emotional learning [SEL] in their curriculum and their daily environment, it is important that schools establish school-family partnerships in order to provide a natural extension of this curriculum into the home (Albright, Weissberg, & Dusenbury, 2011). School-family partnerships create an inclusive, collaborative school community culture around social, emotional, and academic growth (Albright, Weissberg, & Dusenbury, 2011).

This literature review section on community collaboration sets the stage for viewing the goals and values of the communities being served by policymakers through the conceptual framework of the Policy Paradox. As the research for this study was conducted, it was important to keep in mind that current research had shown the value of community collaboration when dealing with school safety concerns. The laws of Illinois require that community collaboration occurs at the annual review of school EOPs. This requirement is met when public safety professionals from the community attend the review. My research included such community members as school personnel and public safety professionals.

Summary and Conclusions

Major Themes in the Literature

A recurring theme throughout the literature review is that there has been an increase in active shooter events and mass murder attacks across the Nation (Bonanno & Levinson, 2014). This information alone should stir educators to be about the business of protecting students from such violence. It is further noted that within the field of education, school EOPs have come to include plans to respond to an active shooter event (School Safety Drill Act). Although most of these plans include a lockdown method response to active shooter events, many law enforcement and military experts have become in favor of a more options-based response to active shooter events (Macari, 2013; Morris, 2013; Sleztac, 2014; U.S. Dept. of Ed 2013). With the use of options-based responses to active shooter events comes the opportunity to view educators engaged in Schon's (1983) "Reflection-in-Action" from a crisis point of view in addition to an academic point of view. This point of view is also true of situational awareness in everyday life. Options-based response used by educators includes a link to the discovery of situational awareness as it is used in crisis events. Throughout the literature, the emphasis was on an outcome of resilience. The theme of resilience is one that exudes the ultimate purpose of school safety, resilience being for the survival and continuation of students and their learning and achievement.

Besides the state governments requiring EOPs that plan for active shooter events (School Safety Drill Act), it became obvious that federal and state governments are more invested in making suggestions as to how to deal with such planning than to make actual

policies (U.S. Dept. of Ed., 2013). Local governments, who were required to make policies, most often put policies in place as suggested by local law enforcement (Buerger & Buerger, 2010). These law enforcement generated policies tell us a great deal about from where local policies for the lockdown response to active shooter events came (Buerger & Buerger, 2010).

What I Learned From the Literature and What is Yet to be Studied

The literature review has provided the following reliable information:

- A safe and secure learning environment is imperative to the learning process.
- Planning for a safe and secure learning environment must be a collaborative process in which all stakeholders take responsibility.
- There has been an increase in active shooter events in schools during the past five decades.
- Schools are required to develop policies regarding response to an active shooter event.
- The lockdown response is no longer a sufficient response and is being replaced by options-based responses.
- Teachers use “Reflection-in-Action” every day during instruction.
- People use situational awareness in their daily lives.
- Federal and state government agencies prefer that local government agencies develop policies that include options-based response to active shooter events.

The literature review has not provided the following information:

- Best practices for developing policies regarding options-based responses to active shooter events.
- Protocols for options-based responses to active shooter events.
- The use of “Reflection-in-Action” thought processes for educators during times of crisis.
- The use of situational awareness in the planning process of options-based responses to active shooters in schools.
- The use of resilience as an outcome in the planning process of options-based responses to active shooters in schools.

Filling a Gap in the Literature

This study filled a gap in the field of education policy as it focused on the development of school policies regarding options-based responses to active shooter events. With the increase in active shooter events in schools and the requirement of schools to develop policies in response to such events, analyzing the development of such policies was an important contribution to the field.

With the lack of protocols available to the researcher regarding options-based responses, it was important to include findings regarding both the policies and the processes for development of such policies. Included in the research was information that linked the idea of “Reflection-in-Action” in academics to “Reflection-in-Action” in crisis situations. Likewise, situational awareness and resilience were explored as part of the

process of policy development of options-based responses to active shooter events in schools.

Chapter 3: Research Method

At the time of this study, the number of school shootings and attacks continues to rise. Policymakers are aware that changes in policies can change statistics. The methodology of the study required a tradition effective for analyzing the development of K-12 school policies regarding options-based responses to active shooter events.

This chapter describes the methodology used for my study, along with a rationale for the methodology. The role of the researcher will be discussed as well as biases and other ethical issues that were considered during the design of the study. Details of the methodology will be shared, such as participant selection, instrumentation, and data analysis. This chapter will also contain a discussion of issues of trustworthiness in the study. A summary will tie each of these sections together.

The purpose of this qualitative multiple case study was to describe the decision-making processes used by school district personnel and the attitudes of school district personnel and public safety professionals when approving the inclusion of options-based responses to active shooter events in EOPs. Through examination of political goals used by school communities when approving the use of an options-based response, I sought to discover patterns, connections, and themes that may assist education and public safety professionals in the development of high quality EOPs. Ultimately, this study will lead to the development of policies that keep students and teachers safe in their schools. When students feel safe, academic achievement improves (Barrett et al., 2012).

Research Design and Rationale

Research Questions

RQ1: What processes are used by school district personnel that lead to the adoption of an options-based response to an active shooter event becoming part of the EOP policy?

RQ2: How do political goals influence the adoption of options-based responses to active shooter events becoming part of EOP policies?

RQ3: How are theories of informed situational awareness taken into account in the development of an options-based response to an active shooter event becoming part of the EOP policy?

RQ4: How is the maximum outcome of resilience planned for in the development of an options-based response to an active shooter event policy?

The upcoming table compares theorists with research questions.

Table 1

Theories Used to Generate Research Questions

Theorist	RQ1: What processes are used by school district personnel that lead to the adoption of an options-based response to an active shooter event becoming part of the Emergency Operations Plan policy?	RQ 2: How political goals influence the adoption of options-based response to an active shooter event to become part of the Emergency Operations Plan policy?	RQ 3: How are theories of informed situational awareness taken into account in the development of an options-based response to an active shooter event becoming part of the Emergency Operations Plan policy?	RQ 4: How is the maximum outcome of resilience planned for in the development of an options-based response to an active shooter event policy?
Alice Training Institute (2008)			X	
Cummins & Woodin (2014)				X
Klein (2013)			X	
Ripley (2008)				X
Rosen & Glennie (2010)				X
Stone (2012)	X	X		
Van Horne & Riley (2014)			X	

Central Phenomenon of the Study

The central phenomena analyzed in this study were the decision-making processes resulting in those policies that adopted an options-based response to an active shooter event. Included in this analysis was the influence of political goals on the process of

options-based policymaking. Also, situational awareness and resilience were part of the analysis of policy development.

Research Tradition

The methodology chosen for this research study was qualitative in nature. A qualitative approach was chosen to gain a systemic, integrated, and overarching view of social arrangements and processes, as well as explicit and implicit rules. A multiple case study approach was used in this qualitative study. Yin (2014) discussed relevant situations for the use of the case study approach. Use of a case study approach is valuable when researching how or why a phenomenon occurs, and the focus is on contemporary events. Yin (2014) further explained that the case study methodology does not require the researcher to control behavioral events.

Rationale for the Chosen Tradition

The research questions of the study addressed how certain political goals and values influenced a decision-making process. The research questions were also designed to answer how situational awareness and resilience impact policymaking regarding options-based response to active shooter events. With the rise in the number of school shootings, the subject of active shooter events in schools is a contemporary issue, and this study does not require the researcher to control any behavioral events. The use of how questions, the focus on a contemporary topic, and the researcher not controlling any events matches well with case study research (Yin, 2014).

A second qualitative approach for this study would have been a grounded theory approach in which the researcher would focus on the process by which the decision to

use, or not to use, the options-based response is determined. The researcher should embrace the constructivist's point of view within the grounded theory approach. The constructivist's point of view includes flexible guidelines, learning from the point of view of the researcher, and a theory that is born out of interpretations of that learning (Creswell, 2013). In the case of this study, the use of grounded theory to answer the research questions regarding process, attitude, and influence might have been a good match if I was developing new theory instead of analyzing policy.

A third choice for a qualitative approach would be a dynamic systems approach. This approach would also focus on process, and it would assume change is continuous within organizations and individuals (Patton, 2002). This approach would focus on the natural changes that occur within the process, rather than any outside influences that have impacted the change (Patton, 2002). A dynamic systems approach would not have been suitable for this study, as it would not focus on the outside social and political influences that impact public policy decision making.

Role of the Researcher

As is appropriate to a qualitative case study research design, I was the primary data collector, interpreter, and analyzer for this study. As such, it was important that there was an understanding of the relationship between the participant school communities and me. Through my facilitation of a county school safety task force, a police chief on the task force pointed out several school districts where options-based response policies for active shooter events were being used in a neighboring county. Also, the co-founder of ALiCE gave me a list of school districts in Indiana that have implemented options based

response to active shooters. All participants were chosen because they have implemented an options-based response to active shooter policy in a K-12 school district. I had no ongoing contact or collegial relationship with any of those school communities and would not have had any bias that would need to be managed during the study. I believe that that presented me with the best of both worlds as a researcher. I had insights as to how schools functioned in this area of Illinois and Indiana, yet I had no relationships with those particular districts so I could view the data with fresh eyes. I intended to contact personnel from each of the former mentioned districts regarding their participation in this study.

Biases and Other Ethical Issues

Prior to beginning my research, I held the position of school safety program coordinator in my county. As such, I had developed my opinions about the best ways to respond to all hazards and crisis events in K-12 schools. I had also spent 35 years working in public schools as a special education teacher and administrator, and I had a preferred leadership style that worked well for me while serving in those positions. As I engaged in the interview process, interpreted the responses, and further analyzed what I found, it was extremely important that I remained cognizant of my opinions regarding school safety and my own leadership style. I made sure that neither of these issues had any impact on the gathering of data, interpretation, or analysis. The following strategies were used to minimize any threats of bias on my part:

1. Interview questions included open-ended script that minimized indications of my opinions and leadership style.

2. Data triangulation was used to collect data from a diverse range of individuals within more than one school community.
3. I kept a reflective journal to monitor my thoughts and feelings regarding my research so that I could be vigilant of any biases that might occur.
4. Peer debriefing was used at the end of the analysis process as a final check for biases that I may have missed.

Methodology

Site Selection

To study the decision-making processes used by school districts, as well as the attitudes of school district personnel and public safety professionals when approving the inclusion of options-based responses to active shooter events in EOPs, my research sites must include school communities that have already instituted options-based responses as a school policy. According to 105 ILCS 128/ School Safety Drill Act in Illinois and IC 5-2-10.1-12 Safe school committees in Indiana, this would have been achieved through a cooperative team effort that included community law enforcement, as well as various educators from a district. It was a must that I included whole school communities in the site selection for this multiple case study. A police chief on the task force I chair pointed out several school districts that currently employ the use of options-based response policies for active shooter events. None of the districts fall within the same county as the task force with which I work. The co-founder of ALiCE also gave me a list of school districts that would be willing to participate in this study. Most of these sites were in Indiana. When first approaching these districts, I contacted each superintendent and

explained my research topic, why I chose his or her particular district, what I would need to do and what I would need the district to do. I would explain the commitment process, as well as the IRB approval process. I would further explain that I would meet with participants following IRB approval to explain details and gain participant consent.

Sampling Strategy and Participant Selection

As in most qualitative studies, a purposeful sampling strategy was used. For this study, the plan was to use an effective combination of criterion and snowballing techniques. This strategy would ensure that participants come from a specified district team and yet, do not feel pressured by the superintendent to participate in the study.

105 ILCS 128/ School Safety Drill Act in Illinois and IC 5-2-10.1-12 Safe School Committees in Indiana, require a collaborative team effort when developing policy for EOPs. In the case of Illinois the law also delineates that the team must consist of at least one board representative or designee (usually the superintendent), one principal, one teacher association representative, and a first responder from all areas represented in the community. First responders might include law enforcement, fire, EMT, and emergency management.

I had chosen to include the superintendent or his or her designee, principal, one other member of the team, law enforcement representative, and an additional teacher representative who would be chosen by the teacher association, at each school community site as the participants for my multiple case study. These are the people who, according to state law, should have worked closely on the development of an options-based response to active shooter event policy in their school communities plus an end

user of the policy that had been developed. The plan was to complete a total of five interviews at each site and for each case study, resulting in a total of 15 interviews. Through analyzation of the interview questions, I monitored for saturation. If saturation had not be achieved, additional school communities would have been added to the list of site participants.

Instrumentation

My data collection tools of choice for this multiple case study were two interview protocols that were used to interview the participants at each site (see Appendix C and Appendix D). The decision to use interview protocols were based on my need to gather information regarding events that had previously taken place and also to gather information regarding the result of events that had taken place. Observation would not have allowed for the gathering of information on previous events. Observation would have been an interesting protocol to use in gathering data to answer the research questions. However, the study would have taken an inordinate amount of time and would have required me to find sites that were in the beginning stage of developing a policy to include options-based response to active shooter events. Unfortunately, such sites were not available.

When developing the questions for the interview protocols, questions were based on the conceptual framework and the literature review. Great care was taken to make sure they were conducive to a face-to-face interview. Face-to-face interviews were important in understanding comments that lead to answering the research question regarding attitudes and also in gaining a comprehensive knowledge of processes. The source of the

questions was the conceptual framework of this research study and can be found in the literature review. The questions contain references to decision-making policy (Stone, 2012), and situational awareness (Van Horne, 2014). The questions also include references to resilience (Ripley, 2008) and reflection-in-action (Schon, 1983). The first interview protocol was used to elicit information from the three district team members who were involved in the development of the options-based response policy. The second interview protocol was used to elicit information from each of the teacher participants in the districts as end users of the policy on options-based response to active shooter events. The questions for the first interview protocol (see Appendix C) began with identifying information about the participant and the school district in which he or she is associated. The initial three questions centered on the district's policy and history of response to active shooter events, as well as the participants engaged in the process of making policies regarding EOPs. This set of questions targets RQ 1. The following three questions focused on the process of developing the policy for responding to active shooter events, along with the attitudes of the participants engaged in the process, as well as roadblocks that came up during the process. This set of questions targeted RQ 1. The next two questions asked the interview participants to tie their experiences to the five political goals of the researcher's theoretical framework (Stone, 2012). This set of questions targeted RQ 2. The next four questions regarding training and drills were also structured to elicit a response regarding situational awareness and resilience. This set of questions targeted RQ 3 and 4. The last question gave the interview participants a chance to add any information important to them regarding their experiences. The upcoming

table illustrates the manner in which the protocol 1 interview questions were cross-referenced with the research questions.

Table 2

Research Questions Used to Generate Interview Questions Protocol 1

Question	RQ 1: What processes are used by school district personnel that lead to the adoption of an options based response to an active shooter event becoming part of the Emergency Operations policy?	RQ 2: How political goals influence the adoption of options based response to an active shooter event to become part of the Emergency Operations policy?	RQ 3: How are theories of informed situational awareness taken into account in the development of an options-based response to an active shooter event becoming part of the Emergency Operations policy?	RQ 4: How is the maximum outcome of resilience planned for in the development of an options based response to an active shooter event policy?	Not Applicable
Interview Question 1					X
Interview Question 2	X				
Interview Question 3	X				
Interview Question 4	X				
Interview Question 5	X				
Interview Question 6	X				
Interview Question 7		X			
Interview Question 8		X			
Interview Question 9			X	X	
Interview Question 10			X	X	
Interview Question 11			X		
Interview Question 12				X	
Interview Question 13					X

The questions for the second interview protocol (see Appendix D) began with identifying information about the teacher and the school in which he or she taught. The initial two questions centered on the teacher's perception of what the policy was and the history of response to active shooter events. This set of questions targeted RQ 1. The following two questions were general questions regarding the teacher's training and drills he or she had engaged in when learning how to respond to an active shooter event. This set of questions targeted RQ 1. The next three questions asked the teacher to comment on how situational awareness, resilience, and reflection-in-action had been included in their training. This set of questions targeted RQ 3 and 4. The last question gave the teacher a chance to comment on the topic of teachers responding to active shooter events. Developing the interview questions from the conceptual framework and tying the interview questions directly to the research questions achieved content validity. The upcoming table illustrates the manner in which the protocol 2 interview questions were cross-referenced with the research questions.

Table 3

Research Questions Used to Generate Interview Questions Protocol 2

Question	RQ1: What processes are used by school district personnel that lead to the adoption of an options based response to an active shooter event becoming part of the Emergency Operations policy?	RQ 2: How political goals influence the adoption of options based response to an active shooter event to become part of the Emergency Operations policy?	RQ 3: How are theories of informed situational awareness taken into account in the development of an options based response to an active shooter event becoming part of the Emergency Operations policy?	RQ 4: How is the maximum outcome of resilience planned for in the development of an options based response to an active shooter event policy?	Not Applicable
Interview Question 1					X
Interview Question 2	X				
Interview Question 3		X			
Interview Question 4		X			
Interview Question 5			X		
Interview Question 6				X	
Interview Question 7			X		
Interview Question 8					X

Recruitment

I contacted superintendents or their administrative assistants by phone, from the lists of school districts that had been given to me. I explained my research topic, why I chose his or her particular district, what my responsibilities would be in my research, and what the district's responsibilities would be in the research. I explained the commitment process, as well as the IRB approval process. I further explained that I would meet with potential participants, following IRB approval, to explain further details and gain consent from potential participants. I then waited for district approval.

To make appointments, I then contacted the three districts that agreed to participate in my research study, by phone. I met in-person with the superintendent, or his or her designee, and the police chief of each school community. I introduced myself and shared my background, described my research project, discussed what would be expected of participants, and brought attention to any possible disadvantages and benefits of participating in my research (see Appendix A). I asked the superintendents, or their designees, for the name of one principal that participated in the development of the policy. I also asked for permission to view the school district EOP and Board of Education Policies in house.

Having secured each superintendent's, or his or her designee's permission, I had planned to use a snowball technique to contact potential participants for the study. I contacted the one principal whose name was given to me by the superintendent. If that principal could not participate, I would have asked for the name of another principal, and so on until I found one who was willing to volunteer for the study. I would have then asked that potential participant for the names of two other people who were on the team. I would have contacted those two people, one at a time, until one of the contacts volunteered for the study. With the volunteers, I shared my background, described my research project, discussed what would be expected of participants, and brought attention to any possible disadvantages and benefits of participating in my research. I was also sure that participants understood they might withdraw from the study at any time.

To obtain a teacher participant, it was my plan to contact the Teachers' Association and asked them to ask for teacher volunteers to participate in the study.

When they give me a list of prospective volunteers, I would have contacted each prospective volunteer with preliminary information regarding the study until one of them became an affirmative volunteer. With the volunteers, I shared my background, described my research project, discussed what would be expected of participants, and brought attention to any possible disadvantages and benefits of participating in my research. I was also sure that participants understood they might withdraw from the study at any time.

Data Collection Procedures

Using several different methods of collecting data on decision-making policies regarding options-based responses to active shooter events allowed me to understand the development of these policies from four aspects. By reviewing federal regulations and state laws having to do with active shooter events in K-12 schools, I gathered data on what should be included in policies and how the policies should be developed. When reviewing EOPs at each of the participation sites, I gathered data on what options-based response to active shooter event plans look like on paper. By interviewing team members that were involved in developing the plans, I gathered data on their perceptions of the process of developing those policies. By interviewing teachers who are end users of the options-based response to active shooter event policies, I gathered information as to their perceptions of how the plan has been implemented. This comprehensive and extensive gathering of information provided a sufficient collection of data to answer each of the research questions.

Review of Federal Regulations Regarding Responding to Active Shooter Events in Schools. To understand what the various branches and departments of The United States Government require and recommend regarding responding to an active shooter event in K-12 schools, I reviewed specific federal documents such as Presidential Directive Number Eight (Blanchard, 2008). I analyzed the U. S. House of Representatives hearing on *Protecting Students and Teachers: A Discussion on School Safety in February of 2013*. Another important federal document that was reviewed was the *Guide for Developing High-Quality School Emergency Operations Plans* (U. S. Department of Education, 2013). Each of these documents was available to me online. These documents prepared me for understanding R Q 2 that focuses on political influences that impact EOP policies.

Review of State Laws Regarding Responding to Active Shooter Events in Schools. Other important documents that were reviewed for information regarding what should be included in policies and how the policies should be developed were state laws regarding school safety. I specifically reviewed those laws that target policies regarding response to active shooter events in K-12 schools. I reviewed the school safety laws of three states. Included in this artifact study was the Illinois Safety Drill Act and Indiana's Safe School Committees' Law. Each of these documents was available to me online.

Review of Site EOPs and District Board of Education Policies. To grasp what the options-based response policies look like on paper in each of the participant sites, I extensively reviewed each of the participant sites' EOPs Board of Education Policy Manuals. I focused on information regarding policy development of options-based

response to active shooter events. I also focused on the actual plan for responding to an active shooter event, and I looked for information regarding training and drills of an active shooter event. Artifact examination provided background information for a complete understanding of the development of school EOPs and contributed to an explanation building technique in data analysis. I reviewed each school district's EOP in house.

Interview Process Step One. I met with each potential participant prior to the interview session to establish a foundation of trust and connection. I introduced myself and briefly explained my task as a PhD candidate. I also described my research project, discussed the nature of my research, and why it was important. I shared my professional background as a teacher and administrator. I shared the details and parameters of the interview session and discussed the need to obtain written permission to record the interview session. I gave the participant ample time for questions and explained the participant's right to remove him or herself from the study if not feeling comfortable at any time. These explanations were reinforced by the distribution of a participant FAQ Sheet. I had planned to leave the consent form and the FAQ sheet with the potential participant to read over until we met for the interview. I had planned to establish a date, time, and place for the interview.

Interview Process Step Two. I arrived on time with copies of the questionnaire to read and a special notebook to take notes on, as well as a Livescribe (<http://store.livescribe.com/smartpen/2gb-echo-smartpen-3.html#pv3>) recording pen to record the session. Time was taken to establish rapport and put the participant at ease. I

asked the participant if he or she had any further questions. I obtained his or her signature on the consent form. I then began reading the questions aloud and taking notes regarding body language and facial impressions. When conducting case study interviews, it is important to remember the interviews should resemble guided conversations, rather than structured queries (Yin, 2014). The researcher's line of questioning, although consistent, should be fluid rather than rigid (Rubin & Rubin, 2011). I was also responsible for monitoring inaccurate data collection due to poor recall. An inherent responsibility of all researchers while interviewing is the issue of monitoring for reflexivity. While conducting interviews, it was imperative that I scrutinized the process to determine if the interviewees were purposefully giving me the answers that the interviewees believed I wanted to hear. This weakness in the data collection process is known as reflexivity (Lincoln & Guba, 1985). After approximately 30 minutes, I offered participants a break. Following the break, I finished the questions, and it was my intention to explain that a summary of the transcript would be emailed to the participant for his or her approval. I thanked the participant for his or her involvement in the study.

Interview Process Step Three. I transcribed the recording of the participant's answers into an MS Word document. I filed the document into an individual file waiting for final analysis. I also transcribed my field notes into an MS Word document and filed them into the same file to be used in the written summary. A summary of the transcripts could have then been emailed to all participants to make sure that something on the recording was not heard incorrectly or misinterpreted. Participants would then have an opportunity to correct any errors or assumptions and return via email.

Data Analysis Plan for Interviews

An explanation building analytic technique that is a special type of pattern matching would be used to discover patterns, connections, and themes within the data collected from the interviews. The goal of this type of analysis was to study the data by building an explanation about the cases (Yin, 2014). This procedure is mainly relevant to explanatory case studies and appropriate for analyzing decision-making policy (Yin, 2014). Insight from such discovery could lead to recommendations for future policy actions (Yin, 2014).

From the transcripts of the interview sessions, narratives were transmitted into matrices established by the researcher. Maxwell (2013) encouraged new qualitative researchers to be deliberate in their organization of data. I used hand coding. I used four levels of coding, open, focused, axial, and selective. One way of doing that is to design a matrix of easy to recognize categories from which patterns and themes can be easily displayed.

Three matrices were developed, one for each research site. Each matrix displayed the participant roles across the top of principal, teacher, law enforcement, and team member across the top. Along the side was be labeled each question. Answers to the questions were transferred from the transcripts into the appropriate squares on the matrices. My notes were also transferred to the appropriate squares.

I then analyzed the data by looking for patterns connections and themes on each of the three matrices. I then did a cross-comparison and looked for patterns, connections and themes between the three matrices. Color was used on the matrices to denote the

finding of patterns, connections and themes. Discrepant cases were analyzed for various outside influences and other differences.

This strategy was repeated with a matrix specifically made for the three teachers who were interviewed at each site. With only one participant at the top, and all of the questions written on the side, the transcripts and notes were placed into these matrices. Patterns, connections, and themes were discovered using the same technique. Discrepant cases were analyzed for various outside influences and other differences.

Data Analysis Plan for Documents

I engaged in pattern matching with the data from documents that I have read and the interviews I have completed. To accomplish this task, I developed a matrix containing each of the document categories of federal regulations, state regulations, EOPs, and interviews at the top and each of my research questions along the side. Information that is addressed by the corresponding square was placed in that square. I then analyzed the data by looking for patterns, connections, and themes on each of the three matrices. Color on the matrices was used to denote the finding of patterns, connections and themes.

Issues of Trustworthiness

Credibility

Credibility, also known as internal validity, is one of the most important aspects of ensuring trustworthiness. There are several ways of establishing how the findings line up with reality. In the case of my research study, one of the ways credibility was established was through the use of well-established research methods. Yin (2014) establishes explanation building through interviewing as an established method of

analyzing case studies through pattern matching. Bennett (2010) also established a similar type of explanation building called process tracing in the field of political science research.

Credibility was also created through my familiarity with the participating communities. In my endeavor to get to know and understand the flavor of the school, district, and law enforcement community, I spent time within the buildings of the people that I interviewed and whose documents I read. I became familiar with the culture and climate of the building.

Patton (2002) identified triangulation of sources as a type of triangulation to use in creating credibility. In this study, triangulation was used to provide credibility by collecting data from a diverse range of individuals and three school communities. Using triangulation of sources allowed me to compare the different points of view of people in the same positions but different school communities and those in the same school communities.

Participant checks, although sometimes controversial, can be a crucial part of providing credibility to a study (Lincoln & Guba, 1985). Allowing participants to weigh-in on the interpretations of the researcher can lend validity to a study. I did this informally as I interviewed each participant. I also had my results reviewed by my peers for the purpose of exploring aspects of my study that might remain implicit only to me (Lincoln & Guba, 1985).

I met with my committee chair at a specified time on a weekly basis to discuss the research process as it was unveiled. The purpose of this was to uncover biases I may have taken for granted, as well as perspectives and assumptions on my part.

My background in itself provided some of the credibility to my study. I have had a 35-year career in education as a teacher, administrator, and continuous improvement specialist. I spent these last three years working on school safety issues. As School Safety Program Coordinator for a County Emergency Management Agency in Illinois, I facilitated a county wide school safety advisory task force, assisted schools and districts with the writing and review of Emergency Operations Plans [EOPs], facilitated and evaluated table-top and functional exercises and drills, developed training modules, participated in staff development, secured guest speakers, and consulted in many other areas regarding all-hazards school emergency operations planning. I have extensive training and experience changing school climates and cultures. My training includes many FEMA courses, multi-hazard planning in schools, development of high-quality EOPs, counterterrorism studies and several threat assessment courses. I am also a certified ALiCE instructor.

Transferability

Transferability, also known as external validity, refers to the extent with which the findings of the research study can be useful in other studies. A study becomes transferable when the researcher has been comprehensive enough in his or her descriptions so that another researcher can duplicate the study. In the case of my research study transferability was established through thick description of the phenomenon under

study. For a study to be transferable, the study must be written in a detailed account that is not superficial and is thick in description. I have been deliberate about my descriptions of my research methods to the point that they could be duplicated as they were first instituted. My study is transferable to other times, settings, situations, and people (Lincoln & Guba, 1985).

Dependability

The dependability of a qualitative study can be ascertained by looking to see if the researcher has been careless or made mistakes in conceptualization of the study, collecting the data, interpreting the findings or reporting results. The consistency of results is often assured by the inquiry of external audits. I have used external audits to confirm the accuracy of my study. I have asked an expert in the field of emergency management and an expert in the field of education to provide feedback to me regarding the adequacy of my data, the accuracy of my preliminary findings, and further suggestions regarding my overall study. Besides these experts, I have been in constant contact with my committee chairperson who has provided me with expert advice.

Confirmability

Confirmability, also known as objectivity, ensures that the findings of the study are the result of the experiences of the participants and not the ideas and biases of the researcher. I have addressed confirmability in my study through the use of triangulation. Lincoln & Guba (1985) identified triangulation of sources as a type of triangulation to use in creating confirmability. In this study, triangulation was used to provide confirmability by collecting data from a diverse range of individuals and three school

communities. Collecting data in this manner allowed me to compare the different points of view of people in the same positions but different school communities and those in the same school communities.

Participant checks, although sometimes controversial, can be a crucial part of providing confirmability to a study (Lincoln & Guba, 1985). Allowing participants to weigh-in on the interpretations of the researcher can lend validity to a study. I had planned to do this by sending copies of my transcript notes to each participant for them to confirm the truth in what they said. I also had my results reviewed by my peers for the purpose of exploring aspects of my study that might remain implicit only to me (Lincoln & Guba, 1985).

I also kept a reflective journal. Throughout the dissertation experience, I have kept a reflective journal memorializing my thoughts during every active shooter event about which I have heard. This has given me the opportunity to process my thoughts regarding issues, solutions, and my own deep-rooted feelings regarding this subject. I also used an additional reflective journal during the research process with the goal of recording decisions made and the reasons I made them, thoughts on interpretation, and what I think about the research in terms of my values and interests.

Ethical Concerns

Ethical issues centered on keeping critical information confidential. It was imperative that interviewees understand and trust that the information they shared would be held in confidence and would not be disclosed directly under their name. It was possible that data would be collected regarding the uncooperativeness of colleagues or

actions unbecoming of others. This could have potentially put a participant's reputation at risk if colleagues knew he or she had discussed such issues. School EOPs were also examined in detail. As a matter of school safety, it was important that the EOPs were not shared without permission from the school districts. The data was obtained via a Livescribe recording pen that recorded interviews and stored the data on my computer. The pen was also used to take notes and store those on my computer. The data was downloaded from the Livescribe pen to the computer and erased from the Livescribe pen. My computer was password protected and available only to me. I have copied all of my research data to a flash drive as well. However, the flash drive is also password protected and will be available only to me. After earning my PhD the data will be erased from my computer and the flash drive will be maintained in a locked box for five more years. After five years have passed, the flash drive will be destroyed. Although they are a matter of public record, EOPs and Board of Education Policy Manuals were only viewed in-house, at the districts. Some districts do not like to have multiple copies of their EOPs available to outsiders.

Sharing Results

Results of this study will be shared with all participants through a written summary of the data collected, as well as an analyzation of what that data means for the field of education and safety in K-12 schools. Summaries of the results of this study are likely to be shared within articles and at presentations for audiences that include educators, emergency management officials, and first responders.

Summary

The trustworthiness of a multiple case studies method in qualitative research must be established through rigorous and detailed processes throughout the study. To establish this trustworthiness, I have been comprehensive in my descriptions of the role of the researcher and the details of the methodological steps that have been taken. This chapter also included the rationale for the participants chosen, the sites chosen, and the use of the data analysis plan chosen. Lastly, issues of trustworthiness were discussed and assurances were established. A comprehensive analysis of each participant's interview and the findings from the interview questions, as well as the document reviews, can be found in Chapter Four. Chapter Four will also address the research questions in conjunction with the findings of the study results.

Chapter 4: Results

The purpose of this qualitative multiple case study was to describe the decision-making processes used by school districts, as well as the attitudes of school district personnel and public safety professionals when approving the inclusion of options-based responses to active shooter events in EOPs. Through examination of political goals used by school communities when approving the use of an options-based response, patterns, connections, and themes were sought that might assist education and public safety professionals in the development of high-quality EOPs. This chapter contains information about the process of data collection and the analysis of those data. Details regarding the setting, demographics, and participants of the study will be shared. Data collection will be explained, and themes of the findings will be discussed. Relationships, patterns, and trends will be discussed, and research questions will be answered from the data. This chapter will also address discrepant cases and issues of trustworthiness.

The Process of Data Collection and Analysis

Setting and Demographics

Schools were chosen according to three criteria. Those criteria were implementation of an options-based response to active shooter policy having taken place within the last five years, a willingness to participate in the research study, and a proximity to the researcher, preferably within one day's drive. Out of the four school communities that initially showed an interest in serving as participant sites, only one of them matched the criteria needed to accomplish this study. For a list of other potential school community sites, I contacted a police chief that had given Run-Hide-Fight

training. I also contacted the ALiCE Training Institute for potential sites. The police chief gave me a list of school districts that he knew had received Run-Hide-Fight training in the adjacent county. The ALiCE Training Institute shared a list of school districts in the Midwest that had received ALiCE training. I extended my search into Midwestern states other than Illinois. Finding three school districts to participate was not as easy as had been anticipated. Several schools that were contacted had received information regarding an options-based response but had never instituted the response as policy. Some districts contacted as possible participants had received training in options-based response but had not implemented such a response or had chosen to implement only certain parts of a response. Several districts that were contacted as possible participants were not willing to participate in the study due to feeling that they had not addressed the issue of options-based response adequately. Other contacted districts were not willing to make the commitment of participation.

Upon finding three K-12 school districts that met the initial three criteria, contacts were made with superintendents at three Midwestern high schools to obtain the required signatures and paperwork. Each of the school districts had very different socioeconomic and demographic characteristics. Mesquackie Community High School was a rural high school serving 2,131 students of little diversity. 24% of the students were eligible to participate in the free lunch program. Harmon High School was a suburban high school serving 5,010 students of little diversity. 7% of the students were eligible to participate in the free lunch program. Hickory Creek High School was a suburban high school serving

a diverse community of 1,142 students with and 38% of the students were eligible to participate in the free lunch program.

My first contacts were made by phone or email to the superintendent designees and police chiefs of each school community. I introduced myself and shared my background, described my research project, discussed what would be expected of participants, and brought attention to any possible disadvantages and benefits of participating in my research.

Participants in the Study

This study initially called for interviews of Board of Education members from each participant district based on the assumption that the Board of Education would have been involved in the approval of the options-based policy. However, in each of the participant sites, Board of Education members had no involvement with the initiation of the options-based policy. For this reason, Board of Education members were not included as participants. The participants interviewed were a law enforcement representative, a teacher, a superintendent designee, and a safety team member from each school, for a total of 12 participants. The law enforcement representatives from each school held the titles of a former assistant police chief, now serving as a current police chief in another district, a police sergeant in charge of SROs, and a SRO. Teacher participants were three high school teachers, one from each school district. Superintendent designee participants from each school district included an assistant principal, an executive associate principal, and an associate principal. Other safety team member participants from the schools included a dean, an assistant principal, and an additional teacher. The following table

lists the participant schools and the safety team members and teachers who participated in the interviews.

Table 4

Participant Code Explanation

Mesquakie	Community	High School (pseudonym)
Participant	Title	Pseudonym
Law Enforcement	School Resource Officer	Officer Atwood
Teacher	High School Art Teacher	Mrs. Echols
Team Member	Associate Principal	Ms. Gustafson
Team Member	High School Science Teacher	Ms. Hagen
Superintendent Designee	Executive Associate Principal	Mr. Johnson
Harmon	High	School (pseudonym)
Participant	Title	Pseudonym
Law Enforcement	Local Police Sergeant in Charge of School Resource Officers	Sergeant Carter
Teacher	High School Social Studies Teacher	Mr. Dodd
Superintendent Designee	Assistant Principal	Ms. Kirk
Hickory	Creek	High School (pseudonym)
Participant	Title	Pseudonym
Law Enforcement	Current Police Chief in Neighboring District	Chief Braver
Teacher	High School Math Teacher	Mrs. Fisk
Team Member	Dean of Students	Mr. Isaacson
Superintendent Designee	Assistant Principal	Dr. Lawson

The original plan for securing participants at each site was to use the snowball method, yet the superintendent designees and I found ourselves under a time crunch due to the impending conclusion of the school year and doubted that we would have time to yield participants. What we found to work well instead was to share information regarding the study with possible participants such as team members and teachers who might be available. Those possible participants could then choose to become participants of the study by joining me during their planning time and allowing me to interview them. I then spent several hours in the schools and participants could come visit me or ask to be visited by me if that was easier for the participant.

Collection of Data

In addition to interviewing participants from school districts that had implemented an options-based response policy, it was important to use other data gathering methods as well. Several different methods of collecting data on options-based responses to active shooter events allowed me to understand the many aspects inherent in the development of policies regarding such responses. Federal guidelines for school policy development in response to active shooters and other general school safety regulations were readily accessible via the Internet and were accessed with the help of seasoned FBI and REMS officials. The state government mandates for school policies regarding responses to active shooters and other general school safety regulations in Illinois, Indiana, and Ohio, were readily accessible via the Internet. I also spent time reviewing the EOPs of each participant school, specifically targeting those sections of the EOP that focused on responses to active shooters.

At Mesquakie Community High School, I completed all interviews and document reviews during an entire day. As volunteer participants were available, they met with me for their interview. I interviewed the participants according to the established protocols and previously developed questionnaires (see appendix A). Harmon High School was split into two sessions. The first session occurred when I met with a teacher and a team member for an interview before the end of the school year. During the second session, which occurred during the summer, I met with team members responsible for the implementation of the options based-response policy in that school district. Interviews at Hickory Creek High School were completed during three different sessions. Interviews of participants who would not be available during the summer months took place during the first sessions at the school and the other interview session took place later in the summer. The law enforcement representative was interviewed off-campus.

At all of the interview sessions, a Livescribe recording pen was used to record the interviews. The recordings were downloaded and transcribed within 48 hours of the interviews using MS Word. I met with each participant before the interview session to establish a foundation of trust and connection. I introduced myself and briefly explained my task as a PhD candidate. I also described my research project. I shared my professional background as a teacher and administrator. I asked about the participant's background to try to get to know the person and establish some commonalities. I shared the details and parameters of the interview session and obtained written permission to record the interview session. I gave the participant ample time for questions and explained the participant's right to remove him or herself from the study if he or she did

not feel comfortable at any time. I then began reading the questions aloud and took notes regarding body language and facial impressions. After the interview, I shared my notes with the participant to make sure I had a complete understanding of what he or she had said. I then thanked the participant for his or her involvement in the study.

Analysis of Data

An analysis of the interview responses and document reviews using four levels of descriptive coding associated with multiple case study analysis led to a cross-case analytic technique that applies specifically to the analysis of multiple case studies. In this study it was used to discover patterns, connections, and themes within the data collected. This type of analysis relies on the researcher's interpretations of the sorted data and not on any system of tallies (Saldana, 2013). The following figure illustrates the coding process followed during analysis of the research.

Coding Analysis Process

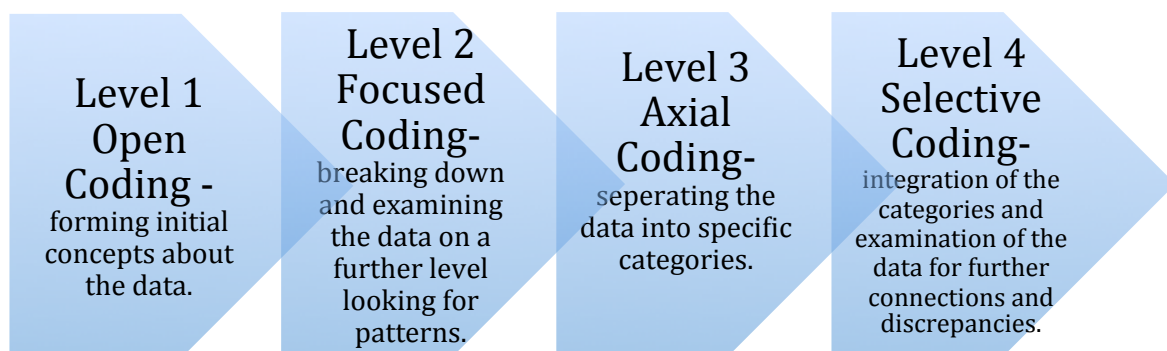


Figure 5. Four level coding process.

I began my analysis by engaging in data reduction activities (Miles et al, 2014). These activities included the setting aside of all data that I initially found to not be

pertinant to my my research questions. I achieved this by reading through the interview transcripts, and the notes from the school EOPs and documents that had been reviewed.

My next step was to engage in open coding (Miles et al, 2014). I reread the data carefully and assigned a color code to each piece of data depending on its relationship to the research questions. I then physically organized each piece of data under its own color code area, noting that some of the data pieces appeared under more than one area.

I carefully read through the data using a second level more focused In Vivo coding method. At this time I reassigned the data pieces new color codes according to new patterns that were appearing within the data. I repeated coding at this level using a descriptive coding method, an evaluative coding method and a process coding method.

During my third level of coding I engaged in axial coding, in which I began to develop categories (Miles et al, 2014). The patterns that had emerged in the level two coding were pointing to distinct catagories of results. I was then physically able to reorganize the data into these new categories with the use of charts I developed to sort the color coded data from the level two coding. This third level of coding allowed for the identification of five conceptual categories and also helped in keeping my interpretations of participants' responses as authentic as possible. These five categories were partnerships and communication; respecting the intelligence of teachers and students; empowerment and action; preparing staff and students for the complex world they live in; and freedom. It was also at this time that I examined the data for similarities between roles of participants. Except for a few answers that would be expected from teachers,

there was nothing significant about the answers participants gave and their roles at their respective schools.

The final level of coding that I engaged in was a selective coding in which I reread the raw data looking for other connections and patterns that may have been missed (Miles et al, 2014). It was this level of coding of the coding process that served to identify four distinct connections: need, implementation, training and follow-through. These connections were found to interface readily within the themes. It was during this level of coding that I realized the discrepancies between the schools committed to the ALiCE program and those teaching Run-Hide-Fight. This became evident when looking for distinct patterns between the schools.

Themes

During the coding process in which five distinct themes became apparent, partnerships and communication was mention often by all three school districts. Respecting the intelligence of both teachers and students was an important value of those working with each of the options-based response programs. Empowering teachers and students to take responsibility for their own safety was a goal set in all three programs, as was preparing staff and students for the complex world in which they live. Having the freedom to make decisions about how to survive an attack was a theme that also came up often. The importance of these five themes will be discussed further.

Partnerships and Communication

In each case study, it was the local law enforcement agency that introduced the idea of implementing an options-based response policy to active shooter events to the

local school district. Overwhelmingly, school district participants shared with the researcher that it was because of the trusted partnerships with law enforcement personnel that the local school districts agreed to consider a new response policy to active shooter events in their schools, as Sergeant Carter describes:

We did have a lot of buy in and I honestly think part of the reason, we have our city and our school corporation, our police department and our school corporation had a good working relationship prior. And I think that helped facilitate the implementation and the efficiency just because there was a lot of mutual trust and buy in on what were doing, so I think that had a lot to do with how quickly we were able to put it [options-based response program] in.

As also Dr. Lawson shared:

We have a very good relationship with the _____ police. We just got an email yesterday; they are holding a school safety talk with all of their local districts in early August. They will talk about new developments in safety and how they will run drills with local schools. They first showed us the Run-Hide-Fight [response].

These trusted partnerships were strengthened by positive relationships established by both local law enforcement and local schools. Having school resource officers in high schools and middle schools strengthened communication avenues. Some districts worked to strengthen relationships with local law enforcement by inviting officers to a free lunch with students at any time the cafeteria was open and inviting officers to speak to students

on a variety of curricular subjects. Sergeant Carter describes the benefits of such a program:

It's difficult when districts don't have a great trusting relationship or just not a lot of communication between public safety and education. And I just think districts as they go, they really need to reach out, not just when there's something major but security for games and doing walk-throughs, having law enforcement participate in safety drills. Ms. Kirk implemented, a few years ago, a free lunch program for uniformed officers that are working. Which in her estimation was if you get a uniformed officer in and you're giving them a 3 dollar school lunch for example, and then you have a visible deterrent and presence, and furthermore, the kids come up and talk to them. And if something is going on they may come up and say I'm worried about my friend.

The relationships between local law enforcement and district administration were so trusting that the notion of an options-based response policy was readily accepted by the administration at all three school districts. Only one school superintendent questioned the use of "countering" as one of the options. However, the superintendent was easily convinced that "countering" was a valid option once he heard a detailed explanation from local law enforcement, as Sergeant Carter explained:

I was expecting a lot more pushback than we got. Initially, the superintendent at the time, said he liked everything except the counter piece. And we had to convince him, through again the federal government

recommendations and ours, how we train that [countering] how we would implement it, it [countering] was a last resort. That you have to give people that option, at least put it in their minds that you're allowed to defend yourself if someone's trying to harm you. So, that was the only slight pushback, but it very quickly, once it was explained how we would train and how we would implement it, he was supportive of that.

Another example of the importance of trusted partnerships when establishing an options-based response policy can be seen in two of the school districts. These two school districts used a train-the-trainer model in which they trained their safety teams first. The options-based response training was then brought to the rest of the school staff. The staff-to-staff training sessions were readily accepted. Both the teachers and the safety team members related that it was because of the trusted relationships among peers and administration that the new protocol was so readily accepted as Mr. Dodd explained:

There was no anxiety. I think that's because we had very competent [district] presenters. Our [district] presenters go around the country and present. They said we take every precaution to keep this [an active shooter event] from happening but we want you to be prepared in case something happens. Because, I think the professionalism, that's why there's no anxiety. You leave training feeling, Okay, I've got the idea! Then once we do our first scenario, your like, Okay I know what to do, I get it!

When discussing partnerships, it would be expected that communication would inherently be part of that conversation. Communication was mentioned by many of the

participants. Ms. Gustafson discussed the importance of communicating key information during a crisis event:

The year before [we implemented an options-based response] we did have a threat which caused us to go on the code red. I think the [unsuccessful] way it was handled it sparked, it really started this real need to come to life a little bit more just in regard to communicating the information that was key.....

Mrs. Fisk describes an important communication piece of the schools crisis plan:

We also have the Crisis Go App on our I-pads and desktops. It's an app we recently got in the past two years, [we're] getting a little more comfortable with it. I'd say we still have a lot of work to go. It contains the ability for us to send out an alarm to other people and everybody who has their Crisis Go App going then it would alarm. We can also send messages through it.

Ms. Kirk related the importance of communication to the district's response to an active violent person, especially in the beginning stages of the response:

1. Call 911
2. Call Building Administration
3. Provide Information to Entire Building through Phone P.A. System
(If at all possible 1-3 should be performed simultaneously.)
4. Administration will call for Campus Lockdown and provide as much information as possible using "plain language."

5. Administration and others in the building will continue to inform of violent person's whereabouts.

Communication was influential in trying to create an atmosphere of acceptance and understanding by parents for options-based response. It took a concerted effort from two of the districts in providing a significant amount of communication to parents. " We held several Safety Parent Nights. We pushed out information through students and through the PTA. We were there to answer all of their questions and ultimately we had support from parents too, shared Ms. Kirk." Ms. Gustafson indicated:

We worried about parents so we had a lot of parent meetings. I think only five showed up. I'm not sure if that meant they didn't care or they just trusted us. Even this year, we've only had one parent keep their student home during a drill." This communication to parents included information describing options-based response and how it might affect their student. It also involved the notice of when drills might occur and an option to keep their child out of the drill. The two schools that kept parents very informed received only slight pushback from parents and fewer than two students were held out of the drills.

The schools that were using ALiCE found, that because a premise of ALiCE is to get as much real-time information to as many people as possible during an active shooter event, communication became a cornerstone of all of their crisis intervention planning. Mr. Johnson shared how the new options-based policy met a need for both safety and communication during a crisis event:

The change in policy met a need for an advanced level of communication. An issue took place in Dec. 2013 when we had an interesting situation, when an individual from outside the state called or had online communication with someone at an alternative school for a bomb threat, but simultaneously claimed that someone was on the roof here. It created an emergency response. They responded accordingly at that time, [however], it froze things. It froze things for a while and it was near dismissal. And so limited communication was provided based upon policies and procedures at the time. Information was provided on a need to know basis, so people were left in a very anxious situation for a long time. So I think ALiCE, being based on, sharing communication, makes a big difference.

However, all of the school districts struggle with finding and implementing the best technological application of this important aspect of an options-based response. Dr. Lawson shared that “the Crisis Go App has been minimally successful,” and Mr. Johnson shared that “We don’t have a quickly activated text communication. I’d say that’s our next step.”

All of the districts have implemented the options-based response protocols starting with the high schools, reaching down to the elementary schools, and out to other districts. One law enforcement district has also reached out to the parochial schools and day cares. In Illinois, participants spoke of their disappointment in not having heard about

options-based response from their state board of education and expressed hope in further networking opportunities with other schools that are implementing such protocols.

Respecting the Intelligence of Teachers and Students

Participants readily shared the premise of options-based response being the assumption that teachers possess the intelligence to make the difficult decisions inherent in the protocols of options-based response. These protocols demand that real-time information be given to teachers regarding an active shooter event, and then it is up to the teacher to make a decision on which option to use. Teachers and other staff must decide whether to evacuate, lockdown and barricade, fight, or alert others. There are no mandated options. Options-based response respects and trusts the intelligence of school staff that had been trained in the response options to make the decision as explained by Sergeant Carter:

All of our staff members, specific to this question, including teachers, are trained that based on the info that they have, they make a decision based on the information that they have. They make a decision on their safety. And the options that they have are to lockdown in place, and then we go for training as far as barricading doors and preparing for if they were having to defend themselves, evacuation, leaving the building, and then we have a reunification plan. But their priority is getting out of the building and as a last resort if they are in immediate danger they are allowed to defend themselves. So we train classroom teachers and

students. Specifically with classroom teachers they make a decision based on the info they have.

Chief Braver reiterates that the decision is up to the staff member in an options-based response:

Teachers go into lockdown and then make a decision on, depending on where the shooter is, whether to run and get out of the school or continue to hide and look for weapons of opportunity. The decision is up to the teachers to make.

Mr. Johnson acknowledges, “Only wrong decision is no decision. Everyone is an independent decision maker.”

Teacher participants shared their frustration with the previous “lockdown” protocol. Mrs. Echols described the way she felt during a training scenario when she was responding using a lockdown response:

During training.... We were asked to do exactly what we had been instructed to do [prior to the new policy], exactly what we had always been taught to do which was duck and hide. And out of all the participants in that one classroom I was the only one who survived. Only because I was so far tucked in underneath a desk she just happened to miss me. That was just a lucky moment. Everybody else was technically shot and I felt like a sitting duck.

Mr. Isaacson shared a view of lockdown without any options for teachers:

Our official plan is lockdown. Run-Hide-Fight is giving us other options.

As we're kind of progressing through this, it seems to be better than sitting in the corner of the room waiting for something bad to happen. Is it perfect? I don't know?

In the contrary, options-based response brought out feelings of empowerment. Mr. Dodd shared, "One of the things they always tell us is, you have the right to survive, it empowers the students, we also tell the students you have the right to survive." Dr. Lawson said, "Run-Hide-Fight gives them a little more freedom to decide. What's best, what's safest for their students?" Sergeant Carter explains how having options empowers staff:

Staff said thank you for giving us those options, because you empower people. I think there is a psychological aspect to this whole program. You know, you can decide what to do because there is no program that you can write one response fits every emergency.

Respect for teachers' decision-making capabilities during crisis events usually comes after initial and on-going training. Not only does it prepare them for becoming situationally aware and ready to make options-based decisions, but it also allows for the feeling of empowerment rather than fear. It was shared that staff that felt discomfort and anxiety with initial training eventually came to feel empowered after trainers acknowledged the fear of some staff and allowed for time, understanding, and further training. Ms. Hagen described the way in which teachers first approached the options-based training:

They were reluctant, at first. Half of them were well that's obviously what we would have done anyway even though we had lockdown. Half of the teachers were, there was nervousness about assuming responsibility for other people and nervousness for having to be so assertive and be a leader for something like this. And some people aren't really comfortable with being a leader in such an intense situation. I don't know if being a leader is the right way to put it or having to be so physically aggressive. There were just teachers uncomfortable with it, I should say. And then some teachers just learned about it and thought this really makes sense and just really took it on easily. So I'd say there was a mix.

Mr. Johnson shared how their school staff anxieties were approached:

So anxieties were handled in some cases by just acknowledging we know this may make you uncomfortable but this is why research says this is a better option for us to make the building safe. There were a very small number of people that we didn't force to participate in the scenarios, just participate in the classroom training, so but that number was very small.

Participants also shared that the mantra "The only wrong decision is no decision," was helpful in establishing that their decisions would be respected. Officer Atwood explains:

The only wrong decision is no decision. If you're going to run, don't hesitate. If you're going to stay, barricade. You know I think you can only, I think you can only get a real feel for it if you're actually running drills like that.

Mr. Johnson related, “The only wrong decision is to not make a decision. And simply preparing people for the potential stresses of the situation is an important step. No one knows how you’re going to actually react.”

Not only do the options-based protocols respect teachers’ abilities to make good decisions during a crisis event, it was shared that students are also respected as intelligent decision makers. At all three of the high schools, participants expressed how important it was to train students in the protocols of options-based response. In two of the school districts, it was shared that this training is an integral part of the curriculum. Ms. Echols indicated, “I talk to my kids about all the different ways they could take on an emergency evacuation. In this day and age they have to take it seriously.” Mr. Dodd described student involvement during a ten minute talking drill:

And then in a few minutes they’ll get on and say okay now the intruder is in the gymnasium and so each of us has in our rooms we’ve posted exit routes so at that point my exit route goes past the gym I would discuss with my kids, alright guys our exit route goes right by the gym so where would we go? The most important thing is practicing the real time information.

Mrs. Fisk also engaged in talking drills with students:

I often, as an individual teacher will take the time to talk with my kids and often they find it, you know they’re kids, they think it’s funny when I say, hey if someone is trying to come in the room were going to block off the door, we’re going to pile up these desks, which is something we don’t do

in a normal lockdown drill. Were going to take these out, were going to find any objects that are sharp or heavy, and can do damage. We can run and go out the tree. We can jump off the tree. A lot of them were laughing, but half of them were sitting there, very serious, thinking about it.

In two of the schools, the staff saw it as an important part of student preparedness, not only for an event that may occur at the school but for any event that may occur outside of the school as well. Mrs. Echols conveyed, “I want to send children out in the world aware. I don’t want them to be scared, but I want them to have options.” Sergeant Carter depicted the benefits of options-based training beyond safety in school:

We might be planting seeds for trees in whose shade will never sit. And I don’t know whose quote that is but we talked about that, that maybe you know its taken a long time to in-grain, get up against the wall and huddle up in the face of the shooter, which is against human instinct and stranger danger’s there for a reason. And so, hopefully in generations it just becomes the norm to take care of ourselves and become responsible.

Because we know there is not always an adult there, there’s not always a police officer, so we have to teach our staff and kids to be safe for themselves. So I think it is well beyond just the active shooter at school.

In all cases, much of the student training consisted of class discussions regarding crisis scenarios that could happen at each of the schools and allowing the students to discuss how they would respond to such an event. Mr. Dodd recounted such a scenario:

They do this periodically, a couple times a month. They get on the PA, they tell us “This is a drill,” they’ll describe somebody. “There’s a guy in a dark hooded sweatshirt, he’s in the B wing, he’s on the third floor of the B wing. Alright, take two minutes and talk with your class. What would you do?” And then in a few minutes, they’ll get on and say, “Okay, now the intruder is in the gymnasium.” and so each of us has in our rooms, we’ve posted exit routes so at that point my exit route goes past the gym. So I would discuss with my kids, “Alright guys, our exit route goes right by the gym, so where would we go?”

Mr. Johnson described what they ask staff to do during a talking drill:

We also want teachers to have discussions with students. During the second drill that we did we arranged to have conversations about counter measures and evacuation routes. The counter measures purely just to understand that the intruder makes it into your safe space, what are you going to do? And then in your evacuation process, your evacuation route may be blocked, what are you going to do?

Officer Atwood said, “It’s 10 minutes. These are people’s lives. It’s not everyday. It’s once in awhile. So it’s important. It can help them even outside this building. We can’t go to the movies anymore without something happening.” The two school districts that include student training as part of the curriculum shared that all of their options-based response to active shooter drills included the students. The Student Support Teams at

these two schools were notified before the drill so that they could help students who might react negatively to such a drill.

Empowerment and Action

Having only one option, which was the lockdown response, and little communication as to what was occurring during an active shooter event, left school staff feeling disenfranchised and constrained, which led to fear. For several of the participants, the previous policy never made sense and one participant claimed to have her own options-based plans that she intended to use even when the previous lockdown policy was in place. Officer Atwood recounted:

As more and more of those unfortunate events happened throughout the U. S., well what did they do? Oh this classroom just sat there and waited, and you know the bad guy entered and all of them were killed. These people decided were escaping and only 1 out of 30 got killed. These all left and none got killed. I think it just proved why we needed to do something more than what we were doing. And then again this building is so large and if we are able to warn people, hey Mr. bad guy is over by the district office, gosh you know a whole majority of this school could probably clear out. It's just logical. You know, my husband just went through the ALiCE training. He just became a SRO. He just went through the training and he said this was the best training. This was common sense training.

Mrs. Echols shared:

I never felt comfortable with lockdown where you get the kids in a corner, turn off the lights, shut the blinds, and hope for the best, I never have liked that feeling so I actually had my own plan for what I would do. My brother-in-law's a police officer and a trainer, so I have taken self-defense classes from him.

The participants from both of the ALiCE schools shared that 75% or more of the staff embraced the new options-based response policy immediately upon the first training. However, one of the participants felt that it wasn't until the actual drill that staff seriously embraced the response. Officer Atwood recounted:

When I first was certified [for ALiCE training], we of course did the training for the staff. That involves actually again putting them through the scenarios and you know I could just personally see the light bulbs going on the more scenarios that they did.

Giving teachers options triggered their right to survive. More than one participant expressed the sense of being empowered to take action and protect students. Mr. Dodd expressed, "Protocol training for us is not everybody do the same thing. It's evolving, it puts the power, it empowers the teachers. It empowers the students. We also tell the students you have the right to survive." Ms. Gustafson related, "Not sure why all other schools aren't doing ALiCE or something like it. It just seems to make sense. It empowers staff and protects students." Several participants also felt that it was the sense of empowerment that replaced the feeling of fear when training for an active shooter event. Mrs. Fisk describes the feelings, "As teachers, we think about this all the time. As

teachers, every time there is a school shooting. Every day you're alive. My husband teaches in a very dangerous area and I think about it every day. What happens if somebody brings something, a gun or something?" Two of the participants described the training as being prepared, not scared. Officer Atwood said, "We're not trying to scare, we're trying to prepare." Sergeant Carter indicated:

I think that within the education field you have a lot of intelligent people. I know almost felt in the past we were insulting their intelligence by telling them we were going to tell you this is the only thing you can do no matter what's going on. So I think when you empower people, give them options to make decisions, that psychologically increases, their, not only their capabilities, because they are trained on what they can do, but emotionally it allows them to be more resilient. Because we know in law enforcement and the military that in times of immediate danger, that you fall back to your level of training. And if you haven't provided any options for someone that would be more likely for them just to freeze and not take any action. Where if they thought through, we use the term prepared not scared a lot, and if they thought through is, I hear gun shot. Or a commotion, this is what I can place in front of my door. So I think that resiliency when you're empowered and given options increases.

Through options-based response training, teachers are taught that the only wrong decision is no decision and that is why it is so important to continue to discuss, train, and drill.

When using an options-based response, it is important to remember that everyone is an independent decision maker. One of the school districts specifically begins to impress upon its middle school students the importance of personal safety with the use of the mantra, “Who is responsible for your personal safety?” Sergeant Carter explained:

Stranger danger is a very important concept to children and parents. Oh I’m empowered to protect myself. Probably we have felt like that even bleeds out into the issue instead of telling kids just wait for help and tell someone, hey your allowed to care and be responsible. One of our mantras is that our SRO will go into the middle school and he’ll say “Hey kids who’s responsible for your personal safety? And he has the kids point their thumbs at their chests. It’s just neat to see the kids, how their confidence is increased.

Safety training in this district starts at the kindergarten level and becomes advanced at the high school level.

Preparing Staff and Students for the Complex World In Which They Live

When training school staff to be prepared for an active shooter event at their school, trainers also emphasized the use of options-based response during an active shooter event in situations other than schools. The Run-Hide-Fight video was not specifically made for a school situation, but for an office experiencing an active shooter event, acknowledging that an active shooter event could take place in many situations. Trainers dealt with some indifference by school staff in having to deal with such a disagreeable subject. Trainers acknowledged that teachers had not entered the profession

thinking they might need to prepare for an active shooter event, however, preparing for such an event was the reality within the complex world they lived. Officer Atwood said, “You [teachers] shouldn’t have to worry about this stuff, but it’s the reality.”

In both of the ALiCE school districts and one of the classrooms from the Run-Hide-Fight school district, discussion drills were woven within the curriculum to give both the students and the teachers an opportunity to discuss actions they would take during an active shooter scenario. In addition to the actual full-scale functional drills, participants felt that discussion drills were also effective in providing the real life practical training that empowered both staff and students to be prepared for an active shooter event, not only in school but anywhere staff or students might find themselves.

Mr. Dodd related:

Those trainings are provided by local police and school staff and it’s honestly really effective. Because I have been to a lot of professional development where the speaker spins your wheels. This one’s not. They tell you they use real life scenarios, everything from Virginia Tech back through Colorado and Columbine. They really made it poignant so people pay attention.

Two participants likened the combination of these drills to the muscle memory produced by military training. Mr. Dodd described the effect of the training:

It’s like the military, when guys are going to combat they’ve been through training so when they get into combat their training will kick in. I do not

dwell on this ALICE stuff at any point during my day. When we do some drills it kicks in.

Officer Atwood shared:

I even have kids come up to me and ask for more drills. They want to do more. They want to practice. Even the students who have some anxiety issues. We're not trying to scare, we're trying to prepare. Hopefully you train and it's like muscle memory. You do more trainings, more in depth trainings of more real life scenarios.

Mr. Johnson described ALiCE discussion drills as, "a way of getting the brain ready to react if it needed to do so."

Building on the advanced training the school district has already experienced, law enforcement at one of the ALiCE school districts hopes to continue staff training in the area of maximum situational awareness by using a specified *Prefense* Program (Tarani, 2014), noting that this is training that will also help staff throughout their lives. Sergeant Carter explained:

I just went to a training at that conference and it's called Prefense. He calls it, the trainer calls it the 90% advantage. His focal point is that across the country, and we do a lot of response training, when there is a shooter here's what we do. But, he's saying that's the last 10% of the incident there's the 90% before. What's your baseline, meaning what's normal in your environment? That varies from environment to environment. If you go into a bank there are tellers behind a counter and if there's something

that strays from that baseline, something that's there that shouldn't be or something that should be there that isn't. We are really gonna focus our teachers on, you know what the baseline is in our building, and our students, and entries. If something doesn't look right and feel right we should check into that.

This is the same district that impressed upon the middle school students that they alone must start to become responsible for their safety, with the goal that such a reminder would lead to students who would be safe wherever they go, and throughout their lives.

Freedom of Choice

Inherent in the word option is the idea of freedom to make a choice. Dr. Lawson described options-based response as, “[options-based-response] gives people freedom to make choices instead of just following a set list of what they have to do. Run-Hide-Fight gives them a little more freedom to decide. What's best, what's safest for their students.” The responsibility of making the choice of what option to use most often belongs to teachers who are in charge of students. The options teachers have during an active shooter event are to:

1. Lockdown, Hide, or Barricade.
2. Run or Evacuate.
3. Counter, Fight, or Protect.

There are no mandated responses for any situation in an options-based response policy. Staff and older students must make the best decision that they can. The only bad decision is no decision. As independent decision-makers, school staff must make

decisions based on real-time information continuously being fed to them through various forms of communication at each district.

Sergeant Carter described the ALiCE program as, “common sense that was not common practice,” further explaining that teachers were intelligent and through training could make intelligent decisions. Teachers have the right and responsibility to survive. Mrs. Echols, a participant from one of the ALiCE school districts, shared that staff was reminded that should they find themselves in an active shooter event to remember, “This is your school! Take back your school!” Mrs. Echols also shared what was said to students, “From the training, I’ve always said to students, just take back your school. This is your school. There are 2000 of you, there’s one bad guy. Just take back your school.”

Connections

There were many cross-case similarities that spoke to important processes that were occurring within each school district that had implemented an options-based response to active shooter response. These cross-case similarities are important lessons for other school districts seeking to implement high-quality school safety planning.

Need

In each of the three study cases, the underlying need for a change in active shooter response policy was to keep students and staff safe from harm during an active shooter event. This was noted by the purpose and goals of each of the EOPs presented by the districts. In as much as the purpose of each EOP is to keep students and staff safe from harm, making a policy change to the EOP would have to result in the safety of students and staff.

All of the school districts were cognizant of the increase in active shooter events, not only in institutions of education throughout the nation but also the increase in active shooter events worldwide. Ms. Kirk shared:

This was a very quiet town. We never had any violence or any other issues. We have a higher socioeconomic population. But I think we were all aware that we were typical of some of the places that had experienced some violent attacks. Columbine, Sandy Hook.

As members of the participant school districts watched the occurrence of such events, members became aware that the traditional lockdown response was not always the best response to an active shooter event.

An additional need that all three school districts shared was the need to communicate during a crisis event. Such a crisis event may or may not be an active shooter event. However, all three districts were extremely cognizant of the fact that communication during an active shooter event was imperative. Dr. Lawson explains:

To try to get as much info to individuals in the building during a crisis would be the goal, but I don't know that we've found anything that's extremely reliable yet at this point. I think people tend to be very isolated during a crisis and I think that has been what has caused some of the mass chaos.

As part of the ALiCE protocol, Mesquakie Community High School and Harmon High School have available in every room a phone that is hooked up to the intercom. ALiCE protocols also call for the use of plain language, such as, "The shooter is in the math

hallway,” and anybody and everybody in the building informing and alerting information as they know it. Hickory Creek High School was engaged in a trial period of a cell phone application that alerts staff and allows for real time communication during a crisis event. The application looked promising, and they were looking forward to more drills in which the application could be further piloted.

Communities surrounding the school districts also had a need for policies that would keep their children safe while attending school. When two of the districts changed their policies from lockdown to options-based response, the communities were very invested in the success of the new policy. It was believed by participants from the two districts that this buy-in from the communities occurred because of the vast amounts of two-way communication, flexibility, and understanding provided by the school districts to their local communities. Ms. Kirk explained:

We had a lot of support from the community. We made an effort to inform them through a Parent Safety Night, communication with the PTA and a concentrated effort to push out information. We answered many questions and the parents and community were very supportive.

Teacher participants described there having been a need for an alternative to the lockdown response. Teachers noted that the lockdown response did not make them feel safe. The teachers were very open to a new response policy when it was introduced, as they felt the need for something that would help them feel more in control of their ability to keep their students safe. Teachers were adamant about their responsibility for keeping their students safe. Mrs. Echols explained:

I'm a mom of 2 kids biologically, but every semester I have 200 kids. So I'm not going to just take it passively. They're mine until they take another class. I care very much about their safety. I gave their parents my word that I would help them. I never felt comfortable with lockdown where you get the kids in a corner, turn off the lights, shut the blinds, and hope for the best, I never have liked that feeling.

The need from law enforcement's viewpoint not only focused on student safety, as is always their primary involvement at schools, but in two of the case studies, there was also a need for legislative compliance. Chief Braver explained, "Then the state mandated an active shooter drill/active event drill without any instructions. So we looked around and decided to go with Run-Hide-Fight." Sergeant Carter recounted:

Fire departments do a wonderful job across the country of being very involved in school safety and protocol. I think historically the police department has done their training and let the schools develop their plans. We felt very strongly that we should be involved in developing emergency response curriculum so we made sure that all of our recommendations were consistent with federal guidelines and federal recommendations. We wrote the plan with that in mind. So it wasn't just the police department recommends it was the police department recommends in compliance with federal recommendations and guidelines. We had all of that Run-Hide-Fight documentation. Homeland Security had a "how to respond to active shooters" and we made sure all of our recommendations were there.

When writing proposals for the use of an options-based response, one of the law enforcement officers made sure that the proposal strictly adhered to State and Federal guidelines and mandates. Another officer was brought to action to include the options-based response as part of training and drills to meet state mandates.

There are many concepts that the school districts share within the connection area of need. Yet, each of the school districts clearly had their own reason for their willingness to approach a new response policy for an active shooter event. Mesquakie School District had a previous scare in which someone with a gun was reported on the roof. Mrs. Gustafson recounted:

The year before [we implemented an options-based response] we did have a threat which caused us to go on the code red I think the [unsuccessful] way it was handled it sparked, it really started this real need to come to lite a little bit more just in regard to communicating the information that was key, because, even myself, I was in a teacher evaluation and the buzzer came on and the code red buzzer came on. I had my radio and called the office and they came across code red. I left the classroom to go to the office. I still didn't know what was going on. After school they were very upset that they didn't know what was going on. They thought it was more of a joke. There was even a teacher who didn't stop teaching. It made the students mad. They said we shouldn't be doing this. They were under the assumption that this may not be a drill and we should be taking cover.

After school we had a briefing because there was a report that someone had been on the roof.

The reported gunman resulted in a lockdown for several hours past dismissal time. During the lockdown, very few people in the school knew what was happening. There was limited communication. In this same community, there was a minor shooting at the mall. These two events stirred the district with the notion that they needed to be doing things differently.

Harmon School District and the surrounding community had never experienced any adverse event. However, the district became very aware that other active shooter events had occurred in communities exactly like their community. The realization of these likenesses made the community and the school district uneasy. When local law enforcement brought an options-based response to the attention of the school district, they were very interested because they felt they were as vulnerable as those other communities who had experienced active shooter events.

Hickory Creek School District had a need to meet state mandates in a way that would protect students and make teachers feel safe. The assistant police chief was determined to find a way to accomplish that goal.

Initial Implementation

Getting approval for an options-based response policy, and designing the initial implementation of that policy, is an aspect of the information shared by participants that was similar in each district. In all of the school districts, local law enforcement became aware of the options-based response during an outside training. Representatives from

these law enforcement agencies, having favorable working relationships with their local school districts, introduced the ideas for the new options-based response policies directly to district superintendents. At one of the districts, the superintendent was hesitant to include training that would ask teachers to defend themselves against an attacker in a physical manner. However, after discussion and a thorough explanation of certain aspects of the training, the superintendent gave his approval. The superintendent in each district communicated to the local board of education as to the change in response to active shooter events policy. Once the law enforcement agencies had superintendent approval, they started discussions with designated administrators at a pilot school in the district. At that point, a school safety team gained an understanding of the new policy and formulated how it would be implemented. In each school, the school safety team developed the plans for training staff on options-based response to active shooter events. Two of these school teams became the trainers for the staff. At these two schools, teacher participants acknowledged that it was the trainers' high level of training that brought a strong element of trust to the process. These same two safety teams also made decisions regarding parent communication and involvement, as well as decisions regarding student training in the new options-based response policy.

In all three cases, the districts were similar in that boards of education, superintendents, and administration were all in favor of the new options-based response policy. All three cases were also similar in that there was clearly some dissent from the teachers during initial implementation. Ms. Gustafson indicated:

There were definitely teachers who were apprehensive about it and they went through the teacher training. There were definitely teachers who didn't like the fact that we were bringing this and the fact that we would be telling kids that they could be shot at. Even the teachers when we did the scenario drills, for whatever reason, we actually got airsoft guns that actually hurt and so when they got hit they didn't like it.

However, participants expressed that the majority of staff was in favor of the new policy. Officer Atwood explained, "When we started out, 50% were hesitant. Once they went through training, the tactical training seemed enlightening. Then a very few left who don't even want to discuss it. The rest, they feel confident." Mr. Johnson shared:

80% of staff embraced it right away. 20% came along after learning more about it and engaging in the training. There were two issues for them, 1. Don't want to admit there's a need in this community. And using the air soft guns for training.

There were some teachers who were worried about training or drilling to actively and physically defend themselves. Participants shared that these fears seemed to be allayed once the training took place and teachers realized that no one was going to make them do anything that they were uncomfortable doing. Mr. Johnson explained:

The intent is to generate a real anxiety about the way you used to handle it and the empowered way that you can handle it using ALiCE protocols. So anxieties were handled in some cases by just acknowledging we know this may make you uncomfortable but this is why research says this is a better

option for us to make the building safe. There was a very small number of people that we didn't force to participate in the scenarios [and] just participate in the classroom training, but that number was very small.

Another implementation similarity between all three of these cases is that once options-based response policy was changed at the pilot school within each district, it was eventually changed at other schools within the district or the area. One of the local law enforcement agencies made sure to engage parochial schools and day cares, as well.

Training

Participants from two of the school districts shared their utilization of the train-the-trainer model for staff training. Both school districts engaged in initial options-based response training for their school safety teams and then those teams came back to the districts and delivered the training to staff. School safety teams were also involved in training new teachers and substitute teachers.

All districts shared that they either use or have thought about using a discussion-based drill. In this type of drill, real life, active shooter scenarios were shared and then a discussion ensued as to what the best course of action might be in such a case. Mr.

Johnson shared:

We also want teachers to have discussions with students. During the second drill that we did we arranged to have conversations about counter measures and evacuation routes. The counter measures purely just to understand that the intruder makes it into your safe space what are you

going to do? And then in your evacuation process your evacuation route may be blocked what are you going to do?

Dr. Lawson explained:

The thing is too, we need to do a better job of actually talking to our students about okay if this were to really happen what kind of things could we do? We can't just sit in a corner and cower. If somebody enters the room we've got to do something. As frightening as that is to talk about, its unfortunate in this day and age, it's got to be talked about. We have to include students more and more in deciding what kind of things could be done.

In some schools these discussions occurred in classrooms with students, in others, they were just for the benefit of school staff. Dr. Lawson indicated:

The other thing we have begun talking about more and more is teachers using their own common sense as to whether to flee or to maintain in a lockdown position. Those are things we can't decide for any given teacher. They're going to have to look at the situation and decide what is best for them and their students.

Mrs. Fisk shared:

I think we need to do a lot more training with our students on this. I often, as an individual teacher, will take the time to talk with my kids. I say hey if someone is trying to come in the room were going to block off the door, were going to pile up these desks which is something we don't do in a

normal lockdown drill. Were going to take these out were going to find any objects that are sharp or heavy and can do damage we can run and go out the tree. We can jump off the tree. A lot of them were laughing but half of them were sitting there, very serious, thinking about it. As teenagers I don't think their brains work the same way that ours do. As teenagers I don't think they think this will ever happen at high school. So I think they start thinking, I really need to start considering this. They need to start experiencing the same Run-Hide-Fight drills that we do, so that their brains can start preparing for this mentally, no matter where they are.

Teacher participants saw the benefit of students being involved in such discussions and included them in such discussions whether the discussions were mandated by the curriculum or not.

Functional drills based on options-based response to active shooters occurred at least once a year in all school districts. Some districts held such drills two or three times a year. The same two districts that included students in classroom active shooter scenario discussions as part of the curriculum also included students in their functional drills. These same two school districts also reported having initiated a system to accommodate special needs students who might be negatively impacted by such a drill, and at one school; care was taken to accommodate a substitute who had experienced a previous school shooting. Ms. Gustafson said, "The Student Support Team was on board with students who had anxiety issues. They were available for kids to come down, I think after the drill if they needed to." Officer Atwood shared:

We had a sub once who had been in a school with a shooter in some other state. She couldn't participate in our drill, it was still too hard. But, she encouraged others as to how important it was to take it seriously.

Participants from all three districts shared that there was a time during initial training or drills when a very small group of teachers could be found dismissing the seriousness of the subject of options-based-response. Officer Atwood expressed:

It's disappointing to me to know that some teachers are still not taking it seriously. That it is an inconvenience and when my own children are grown and in high school I hope they don't have that kind of teacher.

Chief Braver shared, "Some teachers were fine, but there were a few who didn't take it seriously. We found them playing cards, hiding in the closets, or continuing teaching when we were supposed to be having a barricade drill." All of the participants were adamant about the gravity of the training and shared that it was important to be understanding of the staff, however, participants felt the subject matter was extremely serious. Officer Atwood explained:

You can't sugar coat this stuff because if it happens, there is no sugar coating. If someone's getting their head blown off right next to you there's no sugar coating it. So the trainings you do are official. I think it does help people to just realize how important it's you know they may not like it. None of us like it. You shouldn't have to worry about this sending your kids to school or working in a school. But its reality and that's what you have to do.

Follow-Through

In two of the school districts, there was an active and ongoing plan for school safety improvement regarding the options-based response policy. Sergeant Carter shared:

That's actually going to be a focal point of what we are doing this year. There's a, I just went to a training at that conference and it's called *Prefense*. We are really gonna focus our teachers on, you know what the baseline is in our building, and our students, and entries. If something doesn't look right and feel right we should check into that.

Officer Atwood expressed:

We just need to take that next step and make sure we keep progressing with our trainings. Now the school's taken all the necessary precautions making sure each classroom can barricade properly, so lets move on to the next step. We can all handle if you can't barricade, now what or if the bad guy gets in your room, now what. So I'm looking forward to us progressing with our trainings. Getting everyone on the same page so we can all be safe.

In the third district, the case study participants were very cognizant of the need to expand on the first options-based policy initiative with further training and discussion planning. Dr. Lawson explained:

This is a work in progress. We need to continue work with law enforcement. Keep talking about it. Ongoing conversation.

Administration team plans to go to every 3rd hour class and discuss Run-Hide-Fight scenarios. Also have scenario discussions with faculty.

Mr. Isaacson shared:

I think teachers would be great at running or hiding. But be prepared, the more I think about it the more I think we should have gone over it with them again, and maybe involved the students. And absolutely involved the parents. Subs probably do not know about the Run-Hide-Fight. It's interesting that you bring that up. We are having issues this semester. Actually they don't the kids, what the material is, it becomes very difficult. I did it for a semester, it is not fun. _____ and I made a sub contract. Here is what you do in this situation and this situation. But Run-Hide-Fight is not on there. But if that's what were gonna do, than that sub should know.

All participants shared that the districts' commitments to the options-based response policies were commitments that included continuous learning by all involved. It was apparent that various roles throughout the three school districts had taken responsibility for this continuous learning commitment. At one of the schools, the responsibility for continuous improvement of options-based response preparedness lie solely with the administration. At another school, the responsibility is a group effort that is the responsibility of the district safety team. At another school district, the continuous learning effort remains the responsibility of an administrator and law enforcement officer. Part of the continuous learning commitment at two of the three school districts included a

focus on training generations of students to be safe, not just at school but everywhere they went and throughout the entirety of their lives. Sergeant Carter suggested:

How we're thinking has to completely change. To implement this, that takes time. We might be planting seeds for trees in whose shade we'll never sit and I don't know whose quote that is but we talked about that, that maybe you know, its taken a long time to in grain get up against the wall and huddle up in the face of the shooter which is against human instinct and stranger dangers there for a reason. And so hopefully in generations it just becomes the norm to take care of ourselves and become responsible. Because we know there is not always an adult there, there's not always a police officer, so we have to teach our staff and kids to be safe for themselves. So I think it is well beyond just the active shooter at school.

This focus included work toward a more consistent student safety curriculum. This focus started at the high school level, continued to the middle school level, and entered the elementary level. Participants who taught at the high school level shared the increased readiness for response training as the options-based response policy became entrenched in the lower grades. The high school participants found the change in the students that had previously experienced training at the middle school level to be remarkable. Mrs. Echols shared:

Before the junior high schools started doing this, it always took a long time before the freshmen settled down and got comfortable with this. They

were silly and they'd get kinda crazy. Then when they got this stuff in junior high, when they got here the difference was remarkable.

In their quest for extended learning opportunities regarding options-based response training, participants from all of the school districts shared the topics that they hope to tackle in the future in support of their options-based response policy. These topics are:

- More inclusive and preventative response training.
- Provide more time for staff conversation regarding options-based responses.
- Making functional drills more real.
- Using statistical baselines to look for improvement.
- Discuss alternatives to preplanned evacuation routes.
- Conducting dual-hazard functional drills.
- Connecting with a network of other districts or schools who have an options-based response policy in place.
- Spread the word regarding the utility of the implementation of an options-based response policy. One of the school districts was the first in its state to implement such a policy successfully.

Although the collected data pointed to patterns that clearly built and explained themes, it was obvious that the case study data also pointed to connections between the school districts that were helpful in explaining the successful application of the options-based policy. These connections interface with the themes and help build an explanation as to

how active shooter options-based response policy was successfully implemented. The following table illustrates the interface between the connections and themes.

Table 5

Interface of Connections with Themes

	Need	Initial Implementation	Training	Follow- Through
Partnerships and Communication	X	X	X	X
Respecting the Intelligence of Teachers and Students	X	X	X	X
Empowerment and Action	X	X	X	X
Preparing Staff and Students for the Complex World In Which They Live		X	X	X
Freedom			X	X

Research Question One

RQ 1: What processes are used by school district personnel that lead to the adoption of an options-based response to an active shooter event becoming part of the EOP policy?

A noted foundational process that was inherent in all three case studies was a previous and on-going close working relationship between the local law enforcement agencies and the school districts and schools. This first process set the stage for a second

common process in which local law enforcement agencies brought the idea of changing from a lockdown only response to active shooters to an options-based response to active shooters to each of their respective school districts. In all three case studies, administrators, and school staff shared that they were open to the idea of an options-based response policy when introduced to the concept by someone that they trusted and with whom they had a previous relationship. Administrators across cases had some hesitancy regarding the counter/fight part of the options-based programs, but once their questions were answered they were no longer hesitant. Teachers across cases were happy to have options other than a lockdown, as all of the teachers had felt insecure about their situation in responding to an active shooter, before learning about an options-based response. There were several differences between the Run-Hide-Fight school district's processes and the ALiCE school districts' processes. The differences between the two options-based response programs will be discussed later.

Research Question Two

RQ 2: How do political goals influence the adoption of options-based response to an active shooter event to become part of the EOP policy?

When discussing the five political goals used as a lens for this study, it is important to remember that these goals, equity, efficiency, welfare (in the sense of well being), liberty, and security, are the enduring values of community life (Stone, 2012). Participants in all three case studies could not see the goals of equity or efficiency coming into play when establishing an options-based response policy. However,

participants in all three case studies saw the goals of welfare, liberty, and security playing an important part in the implementation of the new options-based response policy.

Participants saw the new policies meeting the goal of security in response to the need to protect the lives of students and school staff. This need was shared as an ever growing need with the increase in K-12 mass shootings. All three school district participants spoke of a need to respond to the fears of their communities in keeping students safe. All three case studies expressed the idea that schools and teachers are always concerned about the well being of their students and making sure that their students have a safe place to learn. Inherent in these concerns comes the political goal of welfare. Each of the case studies had participants who expressed the liberating feeling that came with having the power to make choices regarding one's survival. The idea that there were more options available than just lockdown gave teachers freedom to make choices about how to protect their students and how to engineer their survival. This freedom of choices spoke to the political goal of liberty for participants across the case studies.

Research Question Three

RQ 3: How are theories of informed situational awareness taken into account in the development of an options-based response to an active shooter event becoming part of the EOP policy?

Participants from all three case studies agreed that situational awareness is an inherent component of an options-based response program. In order for a school staff member to make a decision regarding the best course of action during an active shooter

event, the staff member must be aware of the current situation and everything that is going on around them. During an active shooter event, staff members become independent decision-makers, no longer tied to follow directions from a public address system of someone who cannot see what is going on from a staff member's viewpoint. There are no mandated responses. With an options-based response, an active shooter event is a time for common-sense decision-making based on one's situational awareness. In all three case studies, participants shared the more situationally aware a person becomes, the more the person will become empowered.

Research Question Four

RQ 4 How is the maximum outcome of resilience planned for in the development of an options-based response to an active shooter event policy?

Unlike situational awareness, it was difficult for participants to see resilience as part of the options-based response policy. Participants from two case studies saw lockdown as clearly being the opposite of resilience in that lockdown does not allow the use of common sense resilient instincts. Participants from all three school districts felt that the options-based training lead to confidence and better outcomes, not just at school, but any place trainees may find themselves. All three school districts shared that they currently had a separate curriculum for students that dealt with becoming resilient, however, that curriculum had nothing to do with emergency events.

Document Review

Presidential Policy Directive Eight (PPD-8)

On March 30, 2011, President Obama directed the development of a national preparedness goal. This goal was aimed at strengthening the resilience and security of the nation through a comprehensive effort of shared preparation against manmade and natural threats. This national preparedness effort was to be a joint responsibility by all levels of government, as well as private and non-profit sectors, and individual citizens. PPD-8 was divided into five mission areas: Prevention, Protection, Mitigation, Response, and Recovery.

When school districts engage in the development of EOPs, they are taking part in the national preparedness goal that was directed by the President toward all levels of government, including local government. School districts are being encouraged to address these five mission areas in their EOPs. When policies change in the response mission area, such as changing from lockdown policies to options-based response policies because they believe they will serve students and staff better, local governments are fulfilling the responsibility called upon them by Presidential Directive Eight.

ESEA Title IV Part A

ESEA Title IV has been replaced by the Every Student Succeeds Act [ESSA] of 2016. In a review of this new education act, it appears that school safety and school climate were addressed more succinctly. Under a combination of Title I, Title II, and Title IV, ESSA blends several funding streams to implement integrated paths of service

delivery to all students regarding school safety and school climate. This funding can be used toward the following efforts:

- Professional development regarding support of children affected by trauma.
- Implementation of evidence-based policies and practices to prevent bullying.
- Efforts to prevent violence.
- Present evidence-based school safety training to school staff.
- Promote best practices in school safety.
- Enhance collaboration with local agencies around school safety.

ESSA has turned a corner on the inclusion of school safety in Federal education funding. The new law allows for several different stakeholders at many different levels to be the recipients of this funding. The manner in which the funding will be accessed in each state is yet to be seen. However, the recognition by federal legislators that school safety is something worth addressing is noticeable within this new Federal education law. What is absent from this new Federal law are specifics as to what accepted best practices are regarding responses to school emergencies. There exists no mention in ESSA of responses to school shootings. The Department of Education has developed a guide to address such issues separate from the law itself.

Guide for Developing High-Quality Emergency Operations Plans

This guide was a collaborative effort developed in 2013 by the U. S. Department of Education with the help of the U. S. Department of Health and Human Services, U. S. Department of Homeland Security, U. S. Department of Justice, the Federal Bureau of Investigation, and the Federal Emergency Management Agency. This guide addressed:

- The basic principles of emergency management planning in schools, including protection, prevention, mitigation, response and recovery.
- Best practices for developing, implementing and reviewing EOPs, including stakeholder team planning.
- Risk assessment of natural hazards, technological hazards, biological hazards and incidental and human caused threats.
- Best practices for the form, function and contents of EOPs.
- Specific areas of best practices for topics such as:
 - Active shooter events.
 - School climate.
 - Psychological first-aid.
 - Information-sharing.

This guide included active shooters as part of the functional annex of the EOP under adversarial, incidental, and human-caused threats. This guide encouraged that active shooter events are a threat that should be included in all school EOPs. It also urged schools to work in close cooperation with their local law enforcement when planning for such a threat and that the planning should include the school's response before law enforcement arrives on the scene. This guide encouraged the use of a Run-Hide-Fight type of response for active shooter threats.

Table 6

Federal Document Review Comparison

	PPD-8 (2011)	ESEA (2016)	Guide for Developing High- Quality Emergency Operations Plans (2013)
Included prevention of school crises.	Yes	Yes	Yes
Included protection from school crises.	Yes	Yes	Yes
Included response to school crises.	Yes	Yes	Yes
Included recovery from school crises.	Yes	No	Yes
Promoted the strengthening of resilience.	Yes	Yes- in supporting children of trauma	No
Supported security in our schools.	Yes	Yes	Yes
Referred to manmade crises.	Yes	No	Yes
Referred to natural disasters.	Yes	No	Yes
Promoted joint responsibility and stakeholder inclusion.	Yes	Yes	Yes

Rules and Regulations for the State of Ohio

Following the attack on Sandy Hook School, the Ohio Legislature revised the Ohio School Code regarding school safety and security. A part of the revisions included a P-20 Center for Safety and Security that made resources available to create safe and

supportive learning environments in schools throughout Ohio. These resources could be accessed through a website online. The website was also available to help schools understand and implement the changes made to the Ohio School Code regarding school safety and security. Some of these changes included:

- The use of the four components of school security planning; prevention, preparation, response, and recovery.
- The involvement of safety officials, parents, and all staff in development of school safety plans
- A review of school safety plans every three years or when the school building has had some significant change.
 - School safety plans not being considered public records and as such do not have to be shared with the public.
- Encouraging the use of a Crime Prevention Through Environmental Design Review of school buildings.
- Promoting the training of staff in ALiCE or some other type of options-based response.
- Supporting the use of SROs.
- An increase of drills to include three law enforcement drills, two tornado drills, six fire drills and one staff theoretical drill.

The State of Ohio actively encourages schools to train their staff in an options-based response.

The Ohio State legislature also saw fit to include information regarding teachers carrying concealed weapons on school grounds. Ohio is a concealed carry state, however, carrying guns on any campus is forbidden unless the board of education of a school district decide that school staff are permitted to carry guns on school property.

Rules and Regulations for the State of Illinois

In 2005, Illinois legislators signed into law the School Safety Drill Act, which outlined the process for school safety plans to be reviewed by safety officials and other stakeholders, as well as specific drills that needed to take place during the school year. Since that time, the law was again revised in 2013. As of 2016, Illinois' School Safety Drill Act 105 ILCS 128, Section 25 includes the following:

- Every school building's emergency and crisis response plan will be reviewed once a year.
- Participants at the discussion will include the BOE or their designee, the principal, education association representative, law enforcement, fire department, and medical services.
- Mandatory drills; three fire drills, one tornado drill, one law enforcement drill, and one bus evacuation drill.

The Illinois State Board of Education suggests the use of The Guide for Developing High-Quality School Emergency Operations Plans (Dept. of Ed, 2013) when developing school EOPs. This guide does include a section on options-based responses. Of the three Midwest states reviewed for school safety legislation, Illinois had the shortest rules and regulations for school safety.

Rules and Regulations for the State of Indiana

Legislation regarding school safety in Indiana was quite extensive and included such subjects as creation, training, and role of, school safety specialists, members and role of county school safety commissions, purpose and processes for safe school committees, requirements for school safety plans, and requirements for safety drills. The required emergency preparedness drills for Indiana schools were one fire drill per month that school is in session, one tornado drill per school year, and one manmade occurrence drill per year. School EOPs are to be reviewed annually.

Indiana requires that each school district have a school safety specialist. The state takes on the fiscal and physical responsibility of training these individuals. The state of Indiana also requires each school to have a safe school committee. Indiana highly encourages the institution of county school safety commissions, as well as the use of SROs in schools. The state of Indiana had a sizeable School Safety Grant, \$9 million at the time of this writing. As extensive as Indiana's school safety legislation was, within the statutes of the Indiana code, there was no mention of what the preferred response was to an active shooter in public schools. The following table compares the legislative safety requirements mandated for schools in Illinois, Indiana, and Ohio.

Table 7

State School Safety Legislative Requirements Comparison

	Illinois	Ohio	Indiana
Number of Drills	3 Fire, 1 Tornado, 1 Law Enforcement, 1 Bus Evacuation	6 Fire, 2 Tornado, 3 Law Enforcement, 1 Staff Theoretical	7 Fire, 1 Tornado, 1 Law Enforcement
Extensive Online Resources	No	Yes - P-20 Center for Safety and Security	No
Reference Guns On Campus	No	Yes – permitted if approved by BOE	No
Reference The Guide for Developing High-Quality School Emergency Operations Plans (Dept. of Ed, 2013)	Yes	Yes	No
Require Planning with Stakeholders	Yes	Yes	Yes
Review of EOP	Annually	Every 3 Years	Annually
Address EOP Not Being Open to Public	No	Yes	No
Encourage the use of Safety Planning Through Environmental Design	No	Yes	No
Directly Promote the Use of an Options-Based Response	No	Yes	No
Support the use of SROs	No	Yes	Yes
Require and Fund Safety Specialists in Districts	No	No	Yes

Emergency Operations Plan for Mesquakie Community High School

The EOP of Mesquakie Community High School referred to as a School-Centered Emergency Management Guide, encompassed all of the recommended parts of a high-quality school emergency operations plan according to the U. S. Department of Education. The plan was based on the Incident Command System [ICS] and spelled out whom and what positions fit into the system. The guide included in detail hazard specific procedures, evacuation procedures, and soft lockdown procedures. In the case of a very serious or dangerous situation, the guide called for the use of ALiCE as an options-based response. The guide referenced each of the tenets of ALiCE; Alert, Lockdown, and barricade, inform, Counter, and Evacuate. The guide also noted that these actions are non-sequential and up to the staff member to choose what they feel most comfortable in engaging.

Emergency Operations Plan for Harmon High School

Harmon High School had a plan that encompassed all of the recommended parts of a high- quality school emergency operations plan according to the U. S. Department of Education. The plan of this school district also included detailed protocols in the case of a violent intruder. When an active violent person is seen on the premises of the school, the staff is instructed to take the following actions:

1. Call 911
2. Call administration.

3. Provide information regarding the active violent person and their position on campus to the entire building. (#s1, 2, & 3 should be completed simultaneously if at all possible.)
4. The administration will call for a building wide lockdown and continue to provide information as to the whereabouts of the intruder.
5. Staff will use all and any means possible to keep students and themselves safe.
6. If classes are outside at the time of the intrusion they should go to the designated shelter off-campus.
7. If it is possible to evacuate the building, classrooms should do so and go to the designated shelter off-campus.
8. If evacuation is impossible, classrooms should barricade their doors and prepare for a breach of the barricade by looking for distraction devices.
9. If a breach to the classroom occurs, staff and students should cause distractions to the intruder and take control of the violent person.

As part of School District Two's plan, there was an additional guide that covered their policies for dealing with the aftermath of a crisis event.

Emergency Operations Plan for Hickory Creek High School

Hickory Creek High School had a highly developed plan that encompassed all of the recommended parts of a high-quality school emergency operations plan according to the U. S. Department of Education. This EOP had just been updated was complete in its description of the number of students and staff members including those with special

needs that would need help during a crisis situation. An active shooter event was addressed under the heading Active Shooter/Armed Intruder. This heading encompassed any intruder entering the school intent on doing physical harm. This section covered in detail, several scenarios, including what to do if classes were outside of the building. Active shooters were further addressed under the heading Hard Lockdown in which instructions were given to lockdown, barricade, look for weapons of opportunity, determine if you need to evacuate and attack the intruder should he or she breach your classroom door. Instructions were also given to tell students to run and get out any way they could. At no time was any specific options-based response mentioned in the EOP. The following table compares the EOPs of the three school districts.

Table 8

School District EOP Comparison

	School District One	School District Two	School District Three
Is EOP based on the Incident Command System [ICS]?	Yes	No	No
Reference the importance of constant information?	Yes	Yes	No
Refer to keeping students and staff safe by all means possible?	Yes	Yes	Yes
Contain instructions for classes occurring outside during an incident?	Yes	Yes	Yes
Refer to evacuating during an intruder incident?	Yes	Yes	Yes
Refer to barricading during an intruder incident?	Yes	Yes	Yes
Protocol when coming face to face with a violent intruder?	Counter	Distract and Control	Attack
Is there an emphasis on staff decision-making?	Yes	Yes	Yes

Discrepant Cases**Run-Hide-Fight Versus ALiCE**

Results of this research regarding policy development of options-based responses to active shooters indicated several discrepancies in policies between the case that

employed the Run-Hide-Fight training curriculum and the cases that applied the ALiCE training curriculum. These differences in policies are highlighted in the table to follow.

Table 9

Discrepant Case Analysis - Run-Hide-Fight versus ALiCE

Run-Hide-Fight	ALiCE
Staff was trained to seek weapons of opportunity and attack the intruder.	Staff was trained to counter an attack.
Initial training consisted of a half-day in-service.	Initial training consisted of two full days of instruction.
Communication is not a tenet of Run-Hide-Fight.	Communication was emphasized throughout the crisis event.
Initial training trained all staff directly.	Initial training was a train-the-trainer model.
Run-Hide-Fight is not named in the EOP, however, the protocols are embedded throughout the EOP.	Policies were specifically named and written into the EOP, contained protocols for alerts and descriptions of options.
Had not included students in training.	Included students in training.
Teachers felt anxious after training.	Teachers felt empowered after training.
Engaged in the number of active shooter drills required by the state.	Engaged in more than the number of active shooter drills required by the state.
There had been no contact with parents regarding options-based response.	There had been much contact with parents regarding options-based response.
Initial training film took place in an office environment.	Initial training referenced all school situations.
Substitute and new teachers had not received the options-based training.	Substitute and new teachers were routinely trained on a mini version of the options-based protocols once a year.
Although some teachers engaged in real time problem solving discussions regarding crisis events with their students, it was not a required part of the curriculum.	Having discussions of real time problem solving crisis events with students was a required part of the curriculum.
A school culture of safety and well being had not been established.	A school culture of safety and well being had been established.

Evidence of Trustworthiness

Providing evidence of trustworthiness of the data contained in this study is crucial to establishing the validity of this multiple case study. Three methods were used to determine the credibility of this multiple case study, including; the use of well-established research methods, triangulation and my background and experience in the fields of education and emergency management.

Creswell (2013) discussed thick, rich description as a method for establishing transferability. He suggested thick, rich description for providing as much detail as possible to the reader. Thick, rich description has been used in this study to present the reader with a detailed account of the implementation and results of the study.

Discussions with my committee chair and highly regarded experts in the field of emergency management provided dependability to this study. Meetings with each of these people gave me insights as to information that could be found in the data.

Confirmability was established through participant checks and a reflective journal. Participant checks were conducted immediately following each interview as to ensure that the interviewer caught the intentions of the participants' responses at the time of the interviews and not at some alternate times. While interviewing each participant, I made frequent notes to check and make sure that there was an understanding of what was being said by the participant at the time of the interview. A discussion took place immediately following the interview that served as a participant check to ensure I had an accurate understanding of what the participant had just said.

At the behest of my Committee Chair, when I started the journey of writing this dissertation, I had been keeping a journal that I reflected on every time there was a mass shooting. The horrible thing of it all is that it became unmanageable due to the number of mass shootings. To make the journal manageable, I decided to just reflect upon all of the school shootings. That may have been more manageable. However, I found that, during my dissertation-writing journey, information regarding all of the school shootings was not always easy to find. The news of school shootings became more commonplace, and they were not always reported nationwide. My journal reflected a great deal on this phenomenon. It was easy to transition my journal to a research journal, in which I reflected throughout the research process on assumptions and biases that might be interfering with my understanding of the results. I especially turned to journaling throughout the process of reconciling the discrepancies between Run-Hide-Fight and ALiCE. The journal was used most often to confirm thoughts and ideas regarding research results.

Summary

Chapter Four described the process of data collection and analysis undertaken by the researcher. This chapter also illustrated the themes and trends that resulted from the analysis of the data secured in this study. As part of the results of this study, this chapter answers the research questions framed in the study. In the context of the triangulation method, this chapter also contains document reviews. Discrepant cases and evidence of trustworthiness can also be found in this chapter. A discussion of the results,

recommendations for further study, and the study's importance to social change will be discussed in Chapter Five.

Chapter 5: Discussion, Conclusion, and Recommendations

During this qualitative multiple case study, I sought to describe the decision-making processes used by school districts, as well as the attitudes of school district personnel and public safety professionals when approving the inclusion of options-based responses to active shooter events in EOPs. I collected data through interviews and review of government documents, as well as school district EOPs. This acquisition of data was examined through political goals used by school communities when approving the use of an options-based response and the framework of personal situational awareness and resilience.

The results of this study added to the understanding of the need for and implementation of options-based responses to active shooter events in K-12 public schools policies. Evidence was provided that established options-based response to active shooter event policies respected the intelligence of staff and students, empowered them, prepared them for an ever changing world, and trained them regarding choices they could make regarding their own safety. The attributes of a successful implementation of policy were only available through strong and consistent partnerships with law enforcement, continuing communication with stakeholders, and consistent and continual training. This chapter includes an interpretation of the findings, a discussion of the limitations of the study, and recommendations for future research. Implications for social change, as well as recommendations for action, will also be discussed.

Interpretation of Findings

In addressing the research questions of this study, the results of the interview questions were presented within the categorization of five distinct themes and four specific connections. These themes and connections clearly describe the attributes of options-based response policy when addressing active shooter events in public schools. Descriptions of the themes and the participants' contributions can be found in Chapter 4. School staff who participated in this study reported an overall positive view of options-based response policies in public schools and shared best practices for the implementation of such policies.

Themes

Partnerships and communication I find it significant that, in all cases, it was local law enforcement agencies that brought the concept of changing active shooter response policy to include options-based responses to their respective school districts. Even more significant was that due to the trusting relationships between the school districts and the local law enforcement agencies, the new options-based response policy was readily accepted. This evidence established a clear connection between school safety and the relationships between local law enforcement and school districts. Clearly, school personnel rely on law enforcement for direction on school safety matters and seldom take the initiative on their own. As reported in Chapter Two, SROs have become a vital and contributing part of safety and security in schools (Council of State Governments Justice Center, 2014). This was also true in the participant schools of the case study. (Cowan, et al., 2013), School safety policy-making should be a collaboration between school personnel, first

responders, and other stakeholders. In each of the case studies, policy-making through collaboration held true (Cowan et al., 2013).

Respecting the intelligence of teachers and student. Shon (1983) defined reflection in action as a teacher being engaged in a lesson, reflecting on the lesson as he or she taught the lesson, and making necessary adjustments so students could realize better academic outcomes. Schon went on to characterize this as a detailed and practiced skill in which teachers most often become quickly proficient. This teaching skill is clearly similar to the skill of being situationally aware. Situational awareness is a skill all must have when keeping themselves and others safe. Likewise, teachers are similarly situationally aware and have a duty to protect their students. I was not surprised that the participants of this study so often discussed the many ways in which the tenets of options-based response included the respect of the decision-making skills of both teachers and students. Once teachers are trained in options-based response and understand the best ways to apply the options available to them during an active shooter event, they are well-skilled individuals who can make important decisions regarding the safety of students. Giaimo-Ballard & Hyatt (2012) suggested that educators are skillful in the spontaneous, intuitive practice of judging a situation. It is this skill that gained educators the respect of safety professionals involved in this multiple case study.

In contrast to the original conceptual framework (see Figure 1), the results of this multiple case study on options-based response offer an additional framework for managing the outcomes of crises events. I have developed a graphic that indicates with the use of options-based response, it does not matter if the crisis event scenario matches

the drill because the educator has been trained to make decisions based on critical elements of the event.

Options-Based Response Outcome Model

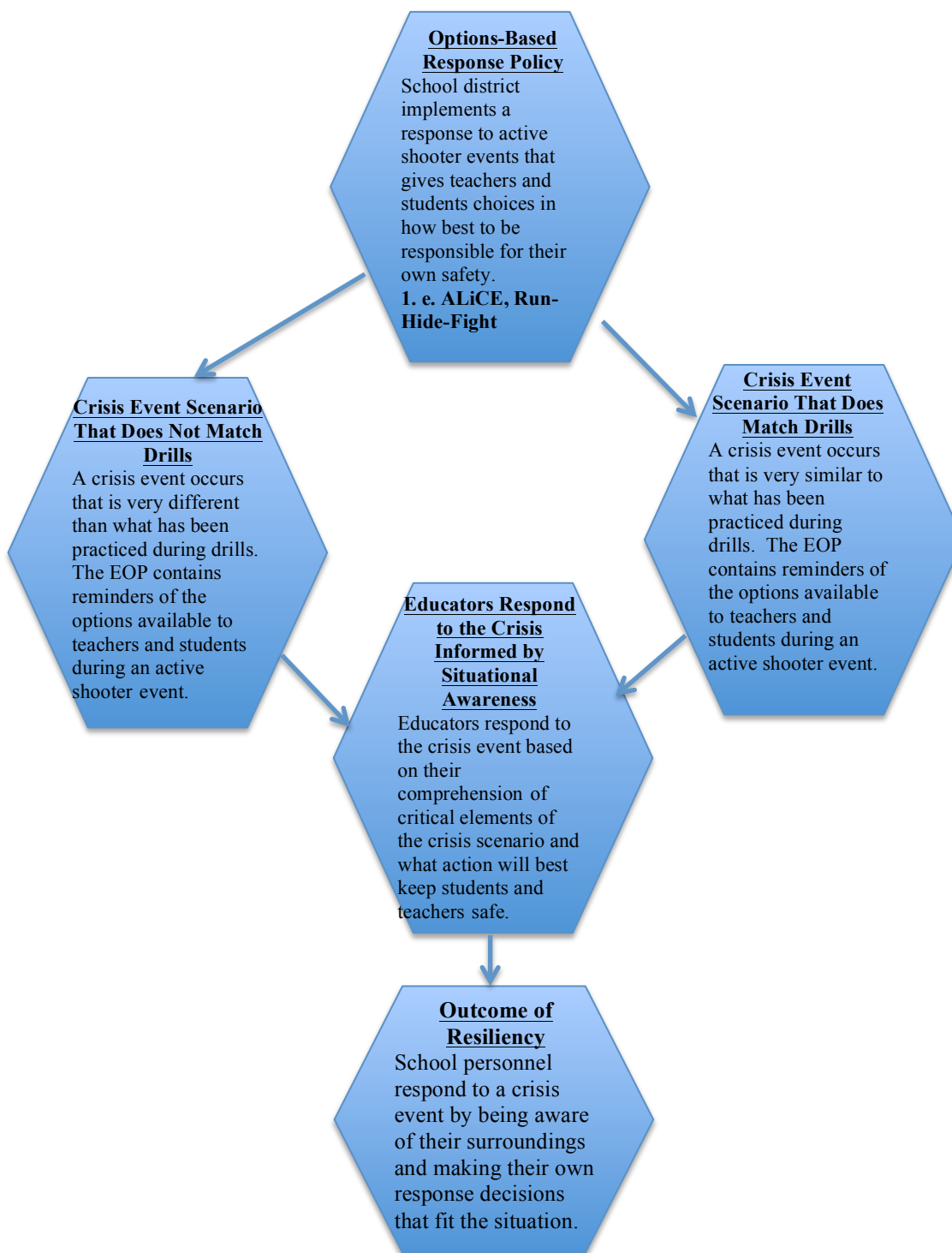


Figure 6. Options-based response training promotes resilient outcomes.

Empowerment and action. Participants from all roles shared their feelings of loss of control during a traditional lockdown situation. In contrast to that feeling, participants frequently discussed the feelings of empowerment that an options-based response instilled in them. For both teachers and students, these feelings of empowerment inspired them to be responsible for their own safety and to take necessary action if confronted by an active shooter event. These feelings of empowerment seemed to be the direct result of options-based response training that left participants and their students prepared, but not scared. These findings on empowerment directly coincide with endorsements from The National Association Of School Nurses (2015) and Galemore (2015) in their recommendations to allow school personnel to choose the best course of action when responding to a school shooting.

Preparing staff and students for the complex world in which they live.

According to the Gun Violence Archive (2017) there were 385 mass shootings in 2016 across the nation. This number was an increase over 2014 and 2015 respectively. These mass shootings did not only occur in K-12 public schools but occurred in many other public places. It was noted in two of the schools, that in addition to fulfilling the goal of preparing staff and students for an active shooter event within the school, the training was also preparing staff and students for an active shooter event that might occur in some other public place. In July of 2015, two teachers were attending a movie theater when it came under fire (Atlantic, 2015). Two people were killed, and nine were injured. However, two teachers who had been trained in options-based response [ALiCE] were credited with saving more lives (Atlantic, 2015). The two teachers knew how to take

action. They knew to pull a fire alarm to alert others that there was something wrong and they knew to run toward the exit (Atlantic, 2015). The action the teachers took, also resulted in an interruption of the attacker's OODA loop (Van Horne & Riley, 2014). As explained in Chapter 2: Literature Review, an interruption in an attacker's OODA loop can give precious time to those trying to escape or counter an attack. ALiCE trained teachers and students are taught about the OODA loop as were many of the participants. Unfortunately, mass shootings throughout the world are becoming more commonplace, and our students are becoming just as aware of it as our school staff. Words from participants remind us that this is a regrettable state of affairs. However, it is one in which participants dealt with in a calm and assertive manner by becoming situationally aware and resilient. School districts shared a need to train students to be prepared for worldwide crises just as FEMA (2013) had encouraged. As seen in Chapter 2: Literature Review, the benefits of engaging youth in disaster preparedness have related well to the training of students in options-based response in each of these case studies. As Ripley (2008) also reminded us there is one element of safety that has been proven again and again to cause resilience during crisis situations, and that is training. The story of the 9/11 hero, Rick Rescorla who tirelessly trained his people to evacuate the tower (Ripley, 2008), confirms what the case studies also confirmed, and that is that consistent and continuous training for crisis situations can prepare individuals for survival.

Freedom of choice. As educators, participants clearly expressed that survival during an active shooter event was not only a right but also a responsibility. The one thing that an options-based response afforded them, in their quest to achieve survival for

themselves and their students, was a choice in how they would endure a brutal attack. Each teacher alone would decide what was best for their students and what they felt most comfortable and skilled in being able to achieve. Options-based response training had prepared teachers to make the tough choices, whether it is to evacuate, barricade in their rooms, or fight the intruder. As pointed out in the research commissioned by the Archdiocese of Milwaukee (Mascari, 2013), an options-based response was a more effective response to an active shooter event than a lockdown response, but was predicated on teachers being highly trained so that they had many options that they felt comfortable with from which to pull. With the mantra “the only wrong decision is no decision,” teachers became consistently aware that a choice must be made.

Connections

When establishing policies for options-based responses to active shooter events, there were obvious and important indications of best practices that lead to successful systemization. It was significant throughout the process that there is a need for the options-based policy established from the beginning. This need may have been a very personal need to the district or the community such as a past shooting or threat, or it may simply be that the school community is aware of other events throughout the nation. Whatever the specific need that triggered the policy and was identified by participants, the reason for implementation of an options-based response policy fit directly into Stone’s (2012) explanation of Policy Paradox. The paradox behind political decision-making lies within the concept that there is an agreement among policymakers that policies should be made through the use of knowledge and scientific data. However, there

is an understanding among policymakers that, in addition to knowledge and scientific data, policymaking is impacted by various political influences.

Once a need has been established, it is important to understand what Federal, State, and local mandates call for regarding responding to an active shooter event. Some laws require certain tenets of an options-based policy and others recommend what such a policy should contain. Participants found that approval from administrators was more readily gained when proposals met legislative requirements.

Getting buy-in from all stakeholders included the Board of Education, administrators, safety teams, school staff, parents, and the local community. The participants of this study had a relatively easy time of convincing these stakeholders that an options-based response policy was the best response for keeping students and staff safe. That is not to say that it did not take some effort on their part. Once again I cannot emphasize enough the important part that the trusting relationships between local law enforcement and the school districts played in establishing these policies. They are truly the source of getting approval from administrators and safety teams, as well as working with the schools to get buy-in from teachers. The Boards of Education easily bought into the new policy with a simple discussion from the superintendent. However, I suspect that Board approval might not take place with such ease in some school districts. Parents and the rest of the community were won over to the new policy with a bombardment of information in the form of flyers, websites, informational meetings and PTA assistance. This collaborative and communicative approach was identified as critical by Martin (2015), when initiating a successful safety policy in schools. He especially pointed out

that various elements of the community should already have trusting relationships in which they understand each other's roles and responsibilities and can fully communicate. This was seen in each case study.

Using a train-the-trainer model with school staff undoubtedly provided a sense of security when learning to deal with something as frightening as an active shooter event. When school staff was able to learn the options-based response techniques from trusted peers and administrators, many of their fears were quickly understood, addressed, and allayed. Likewise, students learning some of these same options-based response techniques from trusted teachers, afforded students the same considerations. This was another aspect of using trusted relationships to further successful policy implementation.

Before any drills took place, successful options-based response schools met with the student support team to plan for any students who might be adversely affected by a discussion or functional active shooter drill. Specific plans were made for each of these students so that they, in some manner, could be a part of the active shooter drills. These plans were strictly adhered to once they were shared with any school staff that might be in contact with those specific students.

Across sites, the use of discussion-based drills was critical to the success of the options-based response program. It was through these short talks regarding what to do in the case of a specific active shooter scenario that both students and teachers furthered their understanding of what to do in the case of any active shooter event. When functional drills took place, students and teachers were prepared to handle them with confidence. In turn, both discussion and functional drills could be seen as being responsible for

heightened situational awareness and resiliency skills. As discussed in Chapter 2: Literature Review, Hammond's (2010) research identified situational awareness as a cognitive skill that can be learned and enhanced. Van Horne & Riley (2014) and Klein (2013) believed that people could be taught to be more observant of their surroundings and to look for contradictions, connections, coincidences and curiosities.

As is the case with most initiatives, not every staff member is always 100% agreeable to change. Not every staff member was on board in each of the case studies. Finding staff that is not participating fully during options-based response training or drills would not just be frustrating, but would be of great danger to students and other staff members. Trainers from the study found that confronting dismissive staff members with an understanding but firm attitude was helpful in most cases. Not allowing the new policy to become a choice was another aspect that participants felt was helpful.

With the increase in active shooter events throughout our nation, there is an obvious need for constant vigilance in the effort to keep students safe. Likewise, it is incumbent on schools with successful options-based response programs to have a continuous learning plan. Each of the school sites had, either formally or informally, developed and implemented a continuous training model within their options-based response initiative.

Once the options-based response policy initiative was up and running, there were several reasons to expand the initiative to include other schools or districts. Within a district, starting an initiative at the high school level and expanding it to the lower levels of the district gave the students a better understanding of overall resilience, as they grew

into mature adolescents responsible for their own safety. Within a community, sharing the tenets of options-based response to active shooter events policy with other school districts became a moral duty to keep the entirety of the nation's children safe.

The information gathered from this study readily lead me to develop a process of best practices for establishing an options-based response to active shooter policy. The following graphic illustrates this process of best practices.

Best Practices Processes for Implementation of Option-Based Response Policies

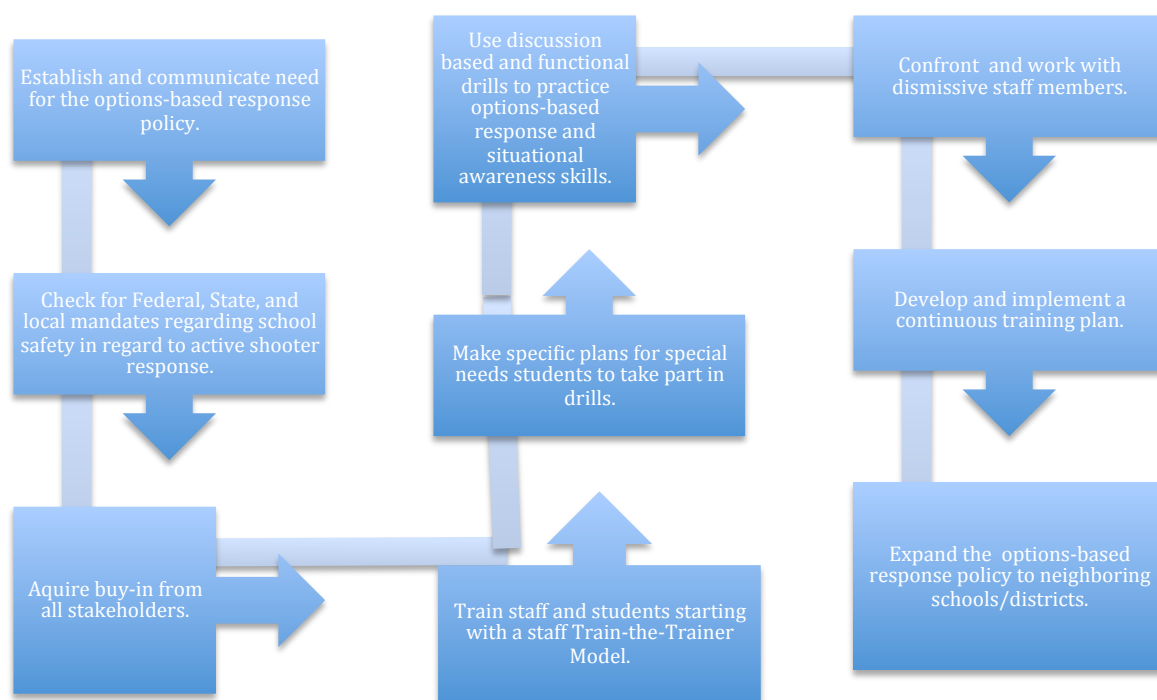


Figure 7. Best practices for development of an options-based response to active shooter policy developed by the researcher from findings discovered through the study.

Limitations of the Study

There were several aspects that could be considered limitations to this study.

Study sites were limited to three school districts in two Midwestern states. The number of

study sites resulted in 12 participants for one-to-one interviews. The number of sites and participants did allow for saturation. However, this was a small representation of the schools and staff in the Midwest that are currently using an options-based response for an active shooter event.

The study was also limited by the participant school sites having all been at the high school level. It is true that some of the interviewed staff had had a part in extending the options-based response program to lower levels within their district or community. It should also be noted that within each of these communities and districts, the options-based response programs were piloted at the high school level and training and implementation of the options-based response programs were similar at the lower levels to the high-school options-based response programs.

I sought to gauge the implementation of an options-based policy. Such a policy can never fully be examined, until the policy is tested during an actual active shooter event. However, it is my guiding hope that such a test never occurs. Participant experiences were then limited by never having experienced an active shooter event.

Recommendations for Future Research

There has been limited research regarding the use of the options-based response policy to active shooters in schools. As active shooter events rise, so should research regarding options-based response. The results of this study have alluded to the following recommendations for future research regarding options-based response:

1. Continuing research regarding options-based response policy in public schools. Specifically in the areas of:

- a. Other regions of the United States.
 - b. Other regions of the World.
 - c. Districts where an options-based response was piloted at elementary or middle school.
 - d. Schools other than public schools. i.e. private, parochial, charter
2. Comparison research between ALiCE and Run-Hide-Fight. There is a need to understand the discrepancies in this current research between the two types of options-based responses. Why did the ALiCE training result in a culture/climate change and the Run-Hide-Fight did not do so? As discussed in Chapter Two: Literature Review, one of the important attributes of a safe and academically productive school is a positive school climate (Durlak et al., 2011). Further research regarding the impact of ALiCE on positive school culture might also be important.
 3. Research related to options-based response training preparing students to become resilient and prepared for a changing world.

Implications for Positive Social Change

The results of this study provided information regarding best practices for safety during an active shooter event for school administrators and staff, as well as for law enforcement involved with schools. The desire for safety stands against every great and noble enterprise (Tacitus, 117). With the rise in school shootings over the last four decades, keeping students safe during school shootings has become an important societal goal. This study has contributed to that goal by providing information regarding the

implementation of a policy that gives school staff options for responding to active shooter events.

With the description of positive attributes of options-based responses to active shooter events, school staff and law enforcement are now able to seriously entertain the implementation of options-based response policies in their efforts to keep students safe during active shooter events. This study gives credence to the partnerships and avenues of communication not only necessary for implementation but those that are a result of the implementation of options-based response. With an emphasis on empowerment of school staff and students, at the time of an active shooter event, this study provides an impetus for new training attitudes in the realm of school safety.

This study also contributed to social change by highlighting areas of school safety through the realms of situational awareness and resilience. Studying the skill of reflection-in-action used by teachers in relation to situational awareness can enhance the manner in which teachers are approached and trained in the area of school safety, specifically training for active shooter events. Many of the best practices that were occurring throughout the study seemed to result in a more resilient lifestyle for both staff and students. Options-based response training included becoming more situationally aware of all of your surroundings and in turn, led to becoming more resilient. This training can be easily duplicated and create students and staff who are situationally aware and resilient throughout their daily lives.

Recommendations for Action

The results of this study should be shared with school administrators, teachers, other school staff, law enforcement, other public safety professionals, and legislators. If the following recommendations were to save the life of just one student, the efforts made by the researcher, educators, and public safety professionals would have been immensely important. However, the goal is to save the lives of many more people in and out of schools.

I propose several recommendations for action. Current lockdown response to active shooter event policies should be replaced with options-based response policies as an alternative response to keeping students and staff safer. This action is recommended in hopes that an options-based response policy will soon become the common response within most school districts. Sergeant Carter referred to ALiCE as “common sense, that wasn’t common practice.” Networking avenues should be set up between schools and districts that have implemented an options-based response policy to facilitate the sharing and creation of best practices. Best practice processes for establishing an options-based response to active shooter policy should be promoted when establishing new school safety policies. School safety trainers must become aware of the idea that because teachers engage in the skill of reflection-in-action on a daily basis, this makes teachers uniquely prepared for, and adept at, training in situational awareness. School safety elements such as situational awareness and resilience must be introduced and promoted as necessary parts of school culture/climate. Options-based response to active shooter policies in public schools should become a topic of conversation with legislators across

the nation. Collaborative groups of educators and law enforcement should be formed to educate and train school personnel and public safety professionals regarding implementation and administration of options-based response to active shooter policies.

Reflections on the Research Study

At the onset of my research experience, I had a general idea of how options-based response to active shooter event policies were being used in public schools. As a result of the journey that accompanied this study, I now have a more complete understanding of the need for options-based policies, the benefits of options-based policies; the improvements needed to some options-based policies and best practices for implementation of options-based policies. My committee chair suggested that I keep a separate journal noting mass shootings as they occurred and my reflections on those shootings. I thought this was a simple task that would elicit some good information and a great opportunity for me to reflect on the general topic I was investigating. Unfortunately, this journal turned out to be an almost impossible task. During the first year of my journaling, mass shootings started to be so commonplace that I began to have a hard time keeping track of them. Unless a large number of people were killed or injured, national media were no longer reporting on the events. After approximately a year of journaling, I changed my criteria to just journaling about mass shootings taking place at schools. However, over the next year, I found the same difficulty with the new criteria. The national media were not reporting on shootings at schools unless there were many casualties. This increase in shootings over my three years of journaling in itself caused me to reflect on the very need for heightened response policies to active shooter events. It

was obvious to me that mass shootings had become the new normal and citizens being prepared with a response to this new normal had become an imperative.

As I grapple with this new normal, I was heartened to glean from the data the enormity of the influence that options-based response training had on the empowerment of staff and students to be responsible for their own safety. I was encouraged by the way options-based response training could assist our youth in becoming resilient citizens beyond their school experiences. In as much as I witnessed a cultural change of “resilience” in the schools that implemented the ALiCE programs, I would like to see such cultural changes of resilience for all schools.

With the understanding that the data overwhelmingly pointed to law enforcement as the impetus to the implementation of options-based response policies, it seems only prudent to engage law enforcement in the advancement of options-based response policies. However, as a former teacher and administrator, I wonder why it is that as school communities we continue to rely exclusively on law enforcement for school safety information and do so little to seek out school safety best practices on our own. Perhaps it is time for school communities to take a more active role in becoming responsible for the safety of students and then work collaboratively with public safety professionals.

Conclusion

This research study examined options-based response to active shooter policies and the implementation of such policies. Interview data pointed out the strong relationships between law enforcement and the school communities necessary to implement options-based policies, as well as strong communication with all stakeholders.

The tenets of options-based response include respecting the intelligence of staff and students, which leads to empowerment. This empowerment allows for freedom of choice and a mechanism that allows staff and students to become resilient within the world that they live.

This chapter displayed and explained best practices for implementation of an options-based response to active shooter. Limitations of the study were discussed. Recommendations for further study were made, including comparison research between ALiCE and Run-Hide-Fight training programs. Implications for positive social change were discussed with the most important societal attribute being that this study may save the lives of students and staff who may someday find themselves involved in an active shooter situation. Recommendations for action were also discussed, most involving advocacy for school safety and options-based response. Lastly, the researcher reflected on her research experience and the unique opportunity options-based response policies provide educators to empower school personnel and students in taking responsibility for their safety through the training consistent with options-based response planning.

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Appendix A

Letter to the Superintendent

Date

Name of Superintendent

Name of School District

Address

RE: Permission to conduct research study

Dear Superintendent _____:

My name is Vicki Abbinante, and I am currently enrolled in the PhD program in Educational Leadership, Policy, and Change at Walden University. My dissertation title is “Policy Decisions and Options-Based Responses to Active Shooters in Public Schools.” As part of my research for my dissertation topic, it will be necessary to interview school personnel involved in the decision-making process of choosing an options-based response to an active shooter event as a policy in several school districts. The data gathered through my research will hopefully provide educational leaders, administrators, and educators with policy-making strategies for the use of options-based responses to active shooter events in K-12 schools.

The purpose of this letter is to request kindly your permission to conduct my interviews with five people associated with your district. Those five are to include the superintendent or his or her designee, a principal, the teacher association president or his or her designee, a law enforcement officer, and a teacher. If you agree to allow me to

conduct my interviews, the data gathered will be compiled with data gathered from other school districts across Illinois. Please be assured that your district and the names of your district's personnel will not be identified anywhere in my research. Participants will be interviewed in a face-to-face manner, at the convenience of the participant. I expect the interviews to take place in _____, 2016. Participation in this study is completely voluntary and confidential.

Your approval to conduct these interviews within your district will be greatly appreciated. Feel free to contact me if you have questions or concerns at 815-693-7177 or vicki.abbinante@waldenu.edu. My committee chair is Dr. Kathleen Lynch, and she can be contacted at kathleen.lynch3@waldenu.edu. If you agree to my request, please sign the enclosed consent form and return it in the self-addressed stamped envelope provided.

Sincerely,

Vicki Abbinante

PhD candidate, Walden University

Consent Form

By signing and returning this form, I give Vicki Abbinante, a PhD candidate at Walden University, permission to conduct a research study in the

_____ School District. I acknowledge that

Vicki Abbinante may contact the necessary district personnel to set the most appropriate time to discuss their participation.

Approved by:

Please print your name and title above

Superintendent's signature

Date

Appendix B

Participant Consent Form

Dear Prospective Participant,

I have obtained the support of the superintendent of _____ School District to collect data for my research project entitled: Policy Decisions and Options Based Responses to Active Shooters in Public Schools. I am a PhD candidate at Walden University in the Educational Leadership, Policy, and Change program. I am requesting your cooperation in the data collection process by asking for approximately 45 minutes of your time to ask you interview questions about the process of choosing to use an options-based response to an active shooter event in your district. I propose to collect data during the month of _____. I will coordinate the exact time for the interview according to what works best for you to minimize disruption to your daily activities.

I have chosen to ask you to participate in this study because you have been involved in making policy decisions regarding how to respond to active shooter events in your district. If you agree to be part of this research project, I would ask that you answer some interview questions about your experiences with the emergency operations policy in your school district. Please note, your interview will be taped to transcribe your responses. If you have further questions, please see the enclosed FAQs or contact me at vicki.abbinante@waldenu.edu or 815-693-7177. Thank you for your consideration. I would be pleased to share the results of this study with you if you are interested. I am

requesting your signature to document that I have cleared this data collection with you.

Please return this form to me in the enclosed, self- addressed envelope.

Sincerely,

Vicki Abbinante

PhD candidate, Walden University

I have been given the above information regarding a research study on “Policy Decisions and Options Based Responses to Active Shooters in Public Schools.” I have been given the opportunity to ask questions regarding my role as a participant and I understand that I may refuse to take part, or I may withdraw my consent to be in the study, for any reason. At this date I give my consent to participate in the study.

Printed Name of Participant

Date

Participant’s Signature

Participant FAQs

University: Walden University

Dissertation Title: Policy Decisions and Options-Based Responses to Active Shooters
in Public Schools

Researcher: Vicki Abbinante

Contact Information: vicki.abbinante@waldenu.edu 815-693-7177

Committee Chair: Dr. Kathleen Lynch kathleen.lynch3@waldenu.edu

What are some general things you should know about research studies?

Research studies are designed with the intent to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in a research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed decision about being in this research study. You should ask the researcher named above any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this study is to describe the decision-making processes used by school district personnel and public safety professionals when approving the inclusion of options-based responses to active shooter events in Emergency Operations Policies.

How many people will take part in this study?

If you decide to be in this study, you will be one of 15 participants from three

school districts.

What will happen if you take part in the study?

You will be asked to read the information contained in this form. The researcher will contact you to set up a time that is convenient to you for completing the interview. The interview should take approximately 45 to 60 minutes. At the time of the interview, the researcher will briefly go over the information contained in this form, answer any questions, and ask you to sign the consent form. The interview will then take place. Afterward, the researcher may contact you to check and make sure that she captured your interview answers correctly. The results of the study will be shared with all participants who have requested that the researcher does so.

What are the possible benefits of being in this study?

At the time of this study, the number of school shootings and attacks continues to rise. Policymakers are well aware that changes in policies can change statistics. For this reason, this study requires research that analyzes the development of K-12 school policies regarding options-based responses to active shooter events. The data gathered through this research will hopefully provide educational leaders, administrators, and educators with policy-making strategies for the use of options-based responses to active shooter events in K-12 schools. For participants of the study, the benefits are being part of a study that could ultimately save the lives of students and teachers involved in an active shooter event.

What are the possible risks or discomforts involved from being in this study?

The risks that may be involved in this study are that the participant may not feel

comfortable providing feedback about his or her personal views regarding a decision-making process involving professional colleagues. These concerns may be allayed by the assurances of confidentiality for respondents that will be provided. Only the researcher will hear the participant responses. All responses will be coded and kept confidential. Transcripts and consent forms will be destroyed after _____.

How will your responses be kept confidential?

Participants will not indicate their identities during the interview. They will not be identified in any notes, recordings, transcriptions, or publications about this study. Only the researcher will have access to the interview notes and recordings. Interview notes and recordings will be transferred to coded information on the researcher's password protected computer.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions or concerns, you should contact the researcher listed on the first page of this form.

What if you have concerns about your rights as a research participant?

This project has been reviewed by the Institutional Review Board of Walden University, which ensures that research projects involving human subjects follow strict federal and university regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, Walden University, 100 Washington Avenue South, Suite 900, Minneapolis, Minnesota, 55401. The IRB research participant advocate can be reached directly at 612-312-1210.

Appendix C

Protocol Interview Questions One

Collaborative EOP Team Members

Name:

Title:

Number of Years in Such a Position:

Type of School District: K-8 9-12 K-12

Participant's Role in Emergency Operations Plan decisions:

1. If there were to be an active shooter event in your school or district, what do your emergency plans call for classroom teachers to do?
2. Has your school or district always had this type of plan for teachers to respond to an active shooter event? If yes, do you recall when your district or school first developed these plans? If no, what type of response plan did you have for teachers before this current one? When did it change?
3. Who (what positions) participated in the decision-making process that decided to use or change, to this type of response to an active shooter event?
4. Can you please describe the process involved in making the decision to use this type of response to an active shooter event? Where did the idea come from? How did it become part of the safety plan? Was the board of education involved? Was anybody else involved?

5. How would you describe the attitudes of each of the participants during this process? Did they favor an options-based response? What were some concerns? What did they feel were some benefits?
6. Can you please describe some issues that came up during the decision making process of deciding to use an options-based response to an active shooter event? How were these issues resolved? How do you think these issues may have influenced the implementation of this policy?
7. Could you describe a particular community need that each of the team participants was trying to meet in the development of this policy?
8. I am going to describe five political goals or values that are the standards of analysis most commonly used in policy debates. As I explain each goal or value, I would like you to think about the decision-making process you encountered when approving an options-based response to an active shooter event and explain any political conflicts regarding the interpretation or significance of these goals or values.

A) Equity. Political conflicts in which equality is the goal are most often described as distributive conflicts. These conflicts focus on a fair distribution of the subject matter. The decision must be made as to who the recipients are, what items are to be distributed, and what process will be used in distribution.

B) Efficiency. Efficiency has become an important way of evaluating public policies. Efficient organizations get the most accomplished with the

minimum amount of resources. The social conflict within the goal of efficiency becomes the human risk at which the efficiency occurs.

C) Welfare. Social welfare is something that the public usually agrees upon when defined as helping individuals and families in desperate need. However, the conflict with the goal of welfare appears when within policy there is a need to separate need from desire. The dimensions of needs are vast and have become a political boxing ring for politicians and welfare advocates.

D) Liberty. Politicians have struggled with the definition of liberty throughout the existence of the United States. To meet the goal of liberty through the making of policy, policymakers must be attuned to whose liberty they are preserving. When preserving a group's liberty, are they inadvertently destroying a different groups liberty? Politicians have struggled with the idea that it is impossible to preserve the liberty of everyone.

E) Security. The word security has come to mean safety in many areas of people's lives. The public has come hoping for security against terrorism, economic security, food security, cyber security, environment security, and personal safety. Politicians keep their constituents safe by making good policies. Those policies have been influenced by scientific reports and intelligence information.

Politicians have also been influenced by the public's perception of security and how the media portrays security events.

9. What types of training were discussed and finally included in the final policy regarding options-based response to active shooter events?
10. What plans for drills were discussed and finally included in the final policy regarding options-based response to active shooter events?
11. If we define situational awareness as the skill of observing one's surroundings and making evaluations about what one has observed, would you say that this skill was considered when making plans to train teachers in options-based response to active shooter events? Would you say that this skill was considered when making plans to train students in options-based response to active shooter events?
12. The United States Department of State explains resilience in this manner:

Resilience refers to the ability to successfully adapt to stressors, maintaining psychological well-being in the face of adversity. It's the ability to "bounce back" from difficult experiences. Resilience is not a trait that people either have or don't have. It involves behaviors, thoughts, and actions that can be learned and developed in everyone. Amanda Ripley, author of the book *The Unthinkable* (2008), describes resilience as a precious skill that saves lives. How do you think resilience was considered, if at all, when engaging in the process of developing the policy to include options-based response to active shooter events?
13. Is there anything that you would like to add about the process of choosing this type of response to active shooter event in your district?

Appendix D

Protocol Interview Questions Two

Teachers

Name:

Title:

Number of Years in Such a Position:

Type of School District: K-8 9-12 K-12

Participant's Role in Emergency Operations Plan decisions:

1. If there were to be an active shooter event in your school, what do the school's emergency plans call for classroom teachers to do?
2. Has your school always had this type of plan for teachers to respond to an active shooter event? If no, what type of response plan did the school have for teachers before this current one? Do you recall when did it change?
3. What type of training have teachers received regarding how to respond to an active shooter event in your school? How often do you receive follow-up training? Do you know what teachers who are new to the school receive?
4. Can you describe any drills that you have had that have included an active shooter event? Were the drills with or without students? Can you please describe some of the feelings that came up while engaging in this type of a drill?
5. If we define situational awareness as the skill of observing one's surroundings and making evaluations about what one has observed, would you say that this skill has

been emphasized when training teachers in how to respond to active shooter events? Would you say that this skill has been emphasized when training students in how to respond to active shooter events? If yes, can you give me some examples, please?

6. The United States Department of State explains resilience in this manner:
Resilience refers to the ability to successfully adapt to stressors, maintaining psychological well-being in the face of adversity. It's the ability to "bounce back" from difficult experiences. Resilience is not a trait that people either have or don't have. It involves behaviors, thoughts, and actions that can be learned and developed in everyone. Amanda Ripley, author of the book *The Unthinkable* (2008), describes resilience as a precious skill that saves lives. Can you think of some examples of how resilience training has been included when training teachers to respond to active shooter events? Can you think of some examples of how resilience training has been included when training students to respond to active shooter events?
7. In 1983, Schon coined the phrase *reflection-in-action*, which he described as a teacher being engaged in a lesson, stopping during the lesson, reflecting on the lesson, and making necessary adjustments. Have you experienced this in your teaching? How do you think we could use this same intuitive *reflection-in-action* when it comes to keeping our students safe?
8. Is there anything that you would like to add about teachers responding to active shooter events in schools?