Disaster Preparedness Plan for the Study Abroad Student: How to Engage Students in Hazard Preparedness

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Disaster Preparedness Plan for the Study Abroad Student:

How to engage students in hazard preparedness

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University of Concordia

IPSL

Masters in International Development and Service

Culminating Project/Thesis

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Abstract

In today’s world, hazard preparedness is vital for creating disaster resilient communities across the globe. This is needed now more than ever, due to the increasing number of disasters occurring worldwide (Chafe, 2007; Nakagawa & Shaw, 2004). This culminating project researches individual and community disaster preparedness, especially preparedness in the higher education community, and specifically study abroad individuals. There is a void in the current literature on disaster preparedness for study abroad students; a community of students that is growing and could encounter more hazards than on-campus students. Through case studies of disaster resistant universities and a proposed intervention, this project provides a way to actively engage study abroad students in their own hazard preparedness. Disaster preparedness is extremely important and this research attempts to provide one solution for increasing individual preparedness in the global community.

Keywords: Disaster, Hazards, Disaster Preparedness, Higher Education, Study Abroad Students
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Introduction

Every year thousands of people and hundreds of communities are significantly impacted by disasters. Between 2004 and 2014, the Centre for Research on the Epidemiology of Disasters (CRED) reported there were a total of 6,525 disasters. Studies suggest that in the next decades even more disasters will occur and much larger numbers of people across the globe will be affected (Chafe, 2007; Eikenberry, Arroyave, & Cooper, 2007; Nakagawa & Shaw, 2004). With these predictions, scholars have begun to discuss how to reduce the costs and damages of these disasters. Disaster scholars argue that a greater focus on disaster preparedness will help solve many of the problems related to disasters. Furthermore, scholars recognize that increasing individual preparedness is one of the best ways to create disaster resilient communities and nations (Ablah, Kelley, & Konda, 2009; Paton, Smith, & Johnson, 2005). However, authors identify that there is a large problem with public complacency and individuals simply not preparing themselves. This culminating project works toward developing a way to actively engage individuals in preparing for hazards.

Recognizing that communities vary and are affected by disasters in different ways, this research focuses on preparedness in a very specific community: higher education; and then examines an interesting subset within this community: study abroad students. Study abroad students leave their local communities and become members of new communities, facing new hazards that they are most likely not prepared for. This research asks: “how can officials in higher education actively engage study abroad students in disaster preparedness?” Through case studies and a proposed intervention—a four-step study abroad disaster preparedness plan—this culminating project intends to generate better-prepared study abroad individuals within the global community.
Literature Review

Hundreds of disasters occur every year, killing thousands of people, and significantly impact the lives of individuals and communities. Between 2004 and 2014, the Centre for Research on the Epidemiology of Disasters (CRED) reported that there were a total of 6,525 disasters. These disasters killed 1,059,072 people and another 1,997,932 were adversely affected (World Disasters Report, 2014). In addition to the sheer loss of life, it is estimated that the cumulative financial toll has cost $1,669,662. The deadly and negative economic impact that disasters have indicates the pressing need to limit their effects and to better prepare against these dangers. For this literature review, I will be examining various sources to analyze the effects of disasters, how individuals prepare for hazards, and how students traveling abroad may be better prepared for disasters.

Just in the last decade, the world has witnessed several large-scale and deadly disasters. When Typhoon Haiyan struck the Philippines in 2013, an estimated 10,000 people were killed. In 2012, Hurricane Sandy struck the Northeastern United States and became the second most costly disaster in U.S. history (second only to Hurricane Katrina). In 2011, an earthquake off the coast of Japan triggered a tsunami that led to the meltdown of three nuclear reactors in Fukushima. This deadly chain of catastrophes caused the evacuation of hundreds of thousands of residents. In addition to these large-scale disasters, there are hundreds of tornados, earthquakes, floods, and technological disasters that impact communities every year. These disasters cost lives, destroy homes, cause psychological distress and post-traumatic stress disorder, and often tear apart the fabric of society. They occur every year and on every continent, leaving individuals, families, and communities around the world incredibly vulnerable.
Disasters are also increasing in frequency, adding additional burdens to States, business sectors, and civil society (Nakagawa & Shaw, 2004). Natural disaster expert Zoë Chafe (2007) confirmed this by arguing, “although natural disasters are often presented as rare and unexpected tragedies, the reality is that they now occur more frequently, affect more people, and cause higher economic damages” (p. 113). In a study done by UNESCO in 2010, it was found that “natural disasters, mainly weather related, affect more than 300 million people yearly,” and that “the incidence of natural disasters increased threefold from the 1970s to the 1990s.” Some United Nations (UN) predictions estimate that by 2050, there will be 250 million climate-induced refugees. Because disasters are becoming more prevalent, it is critical that we analyze and research the best protocols for preparedness and intercede in ways that enhance protection of human communities.

Due to globalization, disasters are no longer just impacting livelihoods in the affected areas, but are also disrupting societies and businesses across the planet from where the actual event occurred. The 2013 Global Assessment Report on Disaster Risk Reduction (GAR) stated, “the private sector suffers direct losses when it has invested in locations exposed to hazards without adequate investments to reduce risks. They also experience indirect losses when production, distribution and supply chains are interrupted” (p. 3). The report also asserts that in the last 30 years, direct losses from disasters were over 300 billion dollars. As globalization connects more businesses, these costs will continue to rise (GAR 2013). Disasters are affecting all aspects of society across the globe. An earthquake thousands of miles away can now have direct consequences on businesses, banking institutions, and governments in another area of the world.
The United Nations recognized this global aspect of disasters and in 2010 signed the HYOGO Framework for Action, in which nations acknowledged the need for more focus on disaster risk reduction across the world. The Framework recognized that
disaster loss is on the rise with grave consequences for the survival, dignity and livelihood of individuals, particularly the poor, and hard-won development gains.
Disaster risk is increasingly of global concern and its impact and action in one region can have an impact on risks in another, and vice versa. (p. 1)
The Framework also acknowledged that “there is now international acknowledgement that efforts to reduce disaster risks must be systematically integrated into policies, plans and programs for sustainable development and poverty reduction, and supported through bilateral, regional and international cooperation” (p. 1). This framework recognized that steps must be taken to reduce the vulnerabilities of individuals and communities to disasters.

**Vulnerability of Mobile Individuals**

While all individuals are vulnerable to the costs of disasters, young, mobile individuals are at higher risk. Globalization has resulted in more people migrating and studying abroad; these individuals are more likely to encounter disasters and are more vulnerable. Päivi Mäntyniemi (2012) pointed out that of all the individuals killed by the Sumatra–Andaman earthquake in 2004, half were foreign tourists. Because tourists, migrants, and study abroad students travel and live in another place around the globe, they are statistically more likely to encounter a disaster. Also, many tourist destinations are located in disaster-prone areas, leaving these individuals at a higher risk of being affected.

In a study of the Cayman Islands, Tompkins, Hurlston, and Poortlings (2009) found the new emerging phenomenon “that young, childless, internationally mobile migrants, in rented
accommodation, in coastal locations, may be placing themselves at higher risk from natural hazards than other groups. This group appears more likely than others to expose themselves to hazards” (p. 272). Tompkins et al. established that because these individuals felt their residency was temporary, they put less effort into protecting their homes. These persons were also understood to perceive disasters as less of a threat, and as a result did not take actions to prepare against them.

Mobile populations are also at risk because they often are unaware of warning systems or how to properly prepare. Bird, Gisladottir, and Dominey-Howes (2009) found in a study of tourists in Iceland that “only 22 % of participants knew there was an early warning system in place and just 4% stated they knew the emergency response procedures” (p. 43). These tourists were vaguely aware of the nearby hazard potential of volcanos and earthquakes, but they were not from the community and did not know the warning system or response procedures. Tourists and other mobile populations (such as study abroad students) are less connected to the communities they are in and, as a result, have less knowledge of hazard potential, warning systems, and appropriate responses. In addition, tourists are less likely to research how to prepare for disasters they may encounter (Bird et al., 2009). This research will examine how to encourage disaster preparedness in the mobile population of study abroad students and reduce their vulnerability to disasters across the globe.

**Definition of Disasters**

Before being able to adequately discuss disaster preparedness, it is important to understand the definition of a disaster. Unfortunately, as Ginter, Duncan, McCormick, Rucks, Wingate, and Abdolrasulnia (2006) pointed out, there are “no universally accepted definitions of incident, accident, crisis, or disaster” (p. 333). The literature does give several characteristics of
disasters that can help provide an understanding of what classifies as a disaster. Ginter et al. stated that disasters are “non-routine in nature, cause social unrest and produce victims in excess of available resources” (p. 333). This idea suggests that disasters are entirely natural incidents that become classified as a disaster when they affect large areas of society and overwhelm the available resources. Tierney (2007), however, contends that “disaster scholars now argue that, far from being non-routine, disasters should be understood as normal, common occurrences that reflect the characteristics of the societies in which they occur” (p. 518) and that “at the most basic level, the causes of disasters are socially constructed” (p. 507). Rodriguez, Wachtendorf, and Russell (2004) go further to point out that disaster research “must take into account the emerging systems (i.e., technological innovations in communication and transportation systems), which generate new types of crisis” (p. 131). There is an ongoing debate among prominent disaster researchers, about what the term “disaster” truly means.

Other researchers argue that the word disaster is used incorrectly when “hazard” should be the correct term. O’Brien, O’Keefe, Rose, and Wisner (2006) suggested that the term hazard describes the actual natural occurrence (i.e., fires, hurricanes, earthquakes, etc.), but disasters describe when society cannot properly handle the hazard. These authors point out that “hazards may be natural in origin, but it is the way in which societies have developed them that causes them to become disasters” (O’Brien et al., 2006, p. 65). The United Nations Office for Disaster Risk Reduction (UNISDR) reflected this same opinion and stated, “there is no such thing as a 'natural' disaster, only natural hazards” (UNISDR, n.d., What is disaster risk reduction?). This idea that all disasters are man-made puts emphasis on the problems of a growing human population, poor infrastructure, deforestation, building locations, lack of communication, and
other issues as causes for why hazards turn into disasters. It also leads to the idea that hazards are natural and unpredictable, but disasters are man-made and can be avoided.

Instead of solely defining disasters as natural or man-made, prominent disaster scholar Ibrahim Mohamed Shaluf’s (2007) research describes disasters as fitting into three categories: natural, man-made, or a hybrid. According to him, “natural disasters are catastrophic events resulting from natural hazards. Natural hazards result from internal (beneath the earth’s surface), external (topographical), weather-related (meteorological/hydrological) and biological phenomena” (p. 687); “man made disasters, on the other hand, are those catastrophic events that result from human decisions” (p. 687); and finally, “hybrid disasters are a compound of human decisions and natural forces” (p. 688). Shaluf (2007) did point out that all “disasters have a common denominator, which is the severity of their impact on people, property, and the environment” (p. 688). This categorization of disasters into three sections by Shaluf recognizes the vast difference in the causes of disastrous events. Whereas O’Brien et al. (2006) suggested that disasters are entirely man-made, Shaluf argued that hybrid and man-made disasters do occur because of the way society has developed, but that there are still natural occurrences that can create disasters.

Disasters are not easy to define because they include a confluence of issues from many areas. Mercer (2010) stated, “disasters result from a complex interplay of social, environmental, political and economic factors, strongly linked to development, which can interact with hazard(s) to become disaster(s)” (p. 248). It is important to recognize that the scholars do not agree on whether disasters are entirely natural or man-made; however, most scholars agree that disasters affect society as a whole and often create crises that overwhelm the resources available to that society (Ginter et al., 2006; O’Brien et al., 2006; Shaluf, 2007; Tierney, 2007).
Because there is no one accepted definition of a disaster, a working definition is needed for this research. I propose the working definition of disaster to be: “disasters are man-made or natural incidences that cause unrest within society and overwhelm the resources (food, water, housing, and electricity) directly available to that society.” I also propose that disasters for which study abroad students need to prepare are “man-made or natural incidences that cause unrest within society (or within the institution where the student is studying) and overwhelm the resources of the student, which includes food, water, housing, electricity, and the ability to communicate with the host and home institution(s).” This second definition acknowledges that for a study abroad student, being cut off from communication creates significant vulnerability to their living condition. Both of these working definitions provide a starting point for how and what society and study abroad students need to prepare.

**Disaster Preparedness**

By increasing disaster preparedness, societies improve the ability to ensure that hazards do not overwhelm resources. Most authors agree that preparedness is one of the four steps in emergency management or disaster response (Kapucu, 2008; Pampel, 2008). These four steps of emergency management are generally described as preparedness, response, recovery, and mitigation (Kapucu, 2008; Department of Homeland Security, n.d.; Pampel, 2008). Pampel (2008) stated, “preparedness (or the state of being prepared) refers to the actions taken before the disaster to allow effective response” (p. 59). The United States’ Federal Emergency Management Agency (FEMA) further explained preparedness as “a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response” (Department of Homeland Security, n.d., Plan and Prepare). The UNESCO Guidance Notes for Educational Planners: Integrating conflict and
disaster risk reduction into education sector planning (2011) suggested that some examples of disaster preparedness include

An early warning communication mechanism; evacuation drills; building skills in fire suppression, first aid, and search and rescue; stockpiling and prepositioning of food, water, and educational supplies ahead of flood season or worsening conflict; safe keeping of records, teacher’s guides, and curriculum material; a national emergency preparedness and response plan; a provincial contingency plan and a school safety/preparedness plan. (p. 11)

Preparedness is an important stage of emergency management that can help to reduce the harmful effects that disasters wreck on society.

Preparedness is such an imperative part of the disaster risk reduction process because it has been shown to reduce the costs of disasters. Solomon pointed out that “a prepared population can mitigate the consequences of an emergency in many instances, and may also be able to prevent additional emergencies from occurring (as cited in Turner & Underhill, 2012, p. 546). In 2004, Kapucu (2008) distributed a survey to emergency managers in 67 counties throughout the state of Florida in order to examine the connection between disaster preparedness and community reaction to hurricanes. She found that “successful participation in pre-disaster, consensus-building emergency planning processes can lead to strengthened organizational relationships that improve the effectiveness of response operations and community coordination” (p. 244). The results of the survey showed that “eighty per cent of respondents approached community coordination with ‘tabletop’ exercises or pre-season coordination meetings, and 86 per cent agreed or strongly agreed that emergency communication procedures were made available and utilized” (Kapucu, 2008, p. 251). In addition, the results from Kapucu’s study
supported “the research assumption that the use of community coordination strategies by emergency managers enhances the public response to disasters (in this case, hurricanes)” (p. 256). These studies show that there is a strong connection between preparedness and the ability to keep natural hazards from turning into disasters.

Several analysts point out how disaster preparation is critical to creating a resilient community (Ablah, Kelley, & Konda, 2009; Paton, Smith, & Johnson, 2005; Redlener & Berman, 2006; Turner & Underhill, 2012). Redlener and Berman (2006) discussed how engaging citizens in preparedness reflects the ability of a community to respond to hazards. They stated that, “it is increasingly understood that citizen participation in disaster planning and response is an essential factor in determining actual readiness for major catastrophic events” (p. 101). Ablah et al. (2009) also argued that disaster preparedness has been shown to save lives “whereas insufficient disaster preparedness or warning in events such as hurricanes and tornadoes have demonstrably cost lives” (p. 318). Even though there are many studies that show the value of disaster preparedness, many nations and communities still put more focus on activities after a disaster occurs. (Cutter et al., 2013).

Some nations have acknowledged the need for more focus on preparedness and the HYOGO framework states several considerations and priorities related specifically to this. The framework accepted that “the promotion of a culture of prevention, including through the mobilization of adequate resources for disaster risk reduction, is an investment for the future with substantial returns” (HYOGO, 2005, p. 5). The framework also set strengthening “disaster preparedness for effective response at all levels” as a priority for action along with using “knowledge, innovation, and education to build a culture of safety and resilience at all levels” (HYOGO, 2005, p. 6). It is critical to understand more about disaster preparedness because
engaging communities and individuals in disaster preparedness has been shown to create higher resilience. Paton et al. (2005) contend “because it represents a significant predictor of the capacity to adapt to unforeseen circumstances, it is important to develop strategies to promote the adoption and maintenance of hazard preparedness measures and activities” (p. 25). Disaster preparedness is a key component in disaster risk reduction that needs more research.

**Preparedness for Individuals and Communities**

**Problems**

Disaster preparedness encompasses all levels of society, including individuals, communities, and even state and national governments. Disaster risk reduction is focused on working from the grassroots level and expanding upwards and outwards. Because of the need for a comprehensive framework, this paper will now examine the literature on disaster preparedness at the individual and community level. Although disaster preparedness is important at all levels and should be inclusive of government and national planning, for the purpose of this paper, specific examination will be given to preparedness for individuals and communities.

Researchers agree on the importance of disaster preparedness; however, statistics show that the level of individual preparedness is extremely low. In a multi-state analysis of the Behavioral Risk Factor Surveillance System, Ablah et al. found that only 43% of Americans feel prepared and less than 50% of respondents were determined prepared for disasters. In addition, the analysis determined that “adults younger than 34 years old and women [were] less likely to be prepared than older age groups and men” (2009, p. 318). Miller, Adame, and Moore (2013) found that 66% of Americans feel unprepared for disasters with only 31% having a basic emergency kit (p. 2). This lack of preparedness among individuals is not solely an American phenomenon. Ritchie (2009) observed in a survey of Fortune 500 CEO’s across the globe that
“only 50 percent had taken any action in planning and preparing a crisis plan” (p. 16). In addition, Harries (2008) found that out of residents at risk of flooding in England and Wales, only “6% of those with no experience of flooding have taken any action to prepare for floods and reduce possible damage, and this figure only rises to 39% for those who do have flood experience” (p. 3). Hazards are reported to be increasing, but less than half of the general population is considered prepared for disasters.

Individuals recognize the dangers of hazards, but are not taking steps to prepare for them. Ablah et al. (2009) wrote,

> Despite the clear danger posed by natural and manmade disasters and evidence highlighting the importance of personal preparedness, a cognitive disconnect exists for much of the...public. This is evidenced by the gap between individuals’ likelihood or expectations of being exposed to future disasters and concrete steps taken by those same individuals to ensure their own preparedness. (p. 318)

Paton (2003) also argued that “despite considerable efforts and expenditure on public hazard education, levels of preparedness remain low” (p. 210). However, Kapucu (2008) found that “one of the social realities that disaster planning must face is that the general attitude to disaster preparedness is characterized by public complacency” (p. 246). Even in communities where there has been an emphasis on disaster preparedness, researchers are finding that individuals are not actually taking the steps to prepare themselves against the disaster. Analysts have not been able to identify specifically why these levels of individual preparedness remain so low, but several scholars have provided some possible correlations.

Disaster experts discuss several different reasons behind why the average person is not prepared for a disaster. Some suggest that communication about how to prepare is not clear
(Redlener & Berman, 2006), while others argue that anxiety and the need to feel safe prevents individuals from preparing (Harries 2008; Paton et al., 2005; Sattler, Kaiser, & Hiltner, 2000), and still other authors propose that individuals do not perceive risks as high, and therefore do not prepare (Davis, Hosseini, & Izadkhah, 2003; Paton, 2006). These ideas give some insight into what is missing in disaster preparedness and leads to suggestions of how to improve disaster preparedness.

One big problem with disaster preparedness is that individuals do not understand what it means to prepare or who is responsible for preparing. Redlener and Berman (2006) conducted a national survey of the United States and found the “public confused about what prepared means, an unchanging and even declining engagement of the preparedness message, and mixed perception as to who is in charge in various disaster scenarios” (p. 88). Ablah et al. found in their study that 75% of respondents stated that they believed they were prepared, but it was determined that only 45% of these were actually prepared (Ablah et al., 2009). Currently, the discussion around disaster preparedness is very unclear to individuals. Individuals are not preparing for hazards because they do not understand all that is involved in disaster preparation.

Much of this confusion about how individuals should prepare is related to issues in communication. Kapucu (2008) stated that “preparedness is the realm of emergency planners who construct plans to minimize the effects of hazards and emergencies” (p. 244), but the plans created by emergency planners are not always effectively communicated to the individuals in the community. Reich (2006) argued, “planning has placed major focus on how agencies and governments at the national and local levels should interact with each other. However, there is noticeably less said about how these should interface with individual human beings” (p. 794). The research suggests that individuals are often confused about their responsibilities in
preparedness because government-level officials are not communicating the directions adequately. Miller et al. (2013) noted in their research that weather experts at the National Weather Center in Norman, Oklahoma, “cited a disconnection between the data they can gather and the ability to communicate the results to citizens in an effective manner.” Furthermore, they asserted, “the most sophisticated prediction technologies are rendered useless if the information provided cannot be communicated in a way that moves citizens to act in an effective way” (p. 2). Kapucu (2008) also pointed out, “conflicting or inconsistent information or recommendations may cause the public to disregard or discount information or to act selectively on information that is consistent with their preferences” (pp. 246–247). This is a serious issue in disaster preparedness communication that must be addressed in the future.

A second group of researchers claim that individuals may not prepare for disasters because of fear, anxiety, and the need to feel secure. Harries (2008) performed semi-structured interviews and focus groups to examine the social construction behind preparedness for natural disasters. From the results of this study, Harries argued that some people do not prepare for disasters because of a need to feel secure. He finds that the need to plan for a disaster suggests to individuals that they are unsafe, and so they do not prepare because psychologically they do not want to recognize this potential for not being safe. Harries stated,

To acknowledge that your home is not safe, that society will not always protect you against floods and that nature is not always benign, is to enter a phenomenological territory where material security is no longer certain and new anxieties must be faced. For this reason, householders hold tenaciously to their familiar representations. (p. 20)

Acknowledging that you are not safe or secure can be daunting. If Harries is correct, and individuals do not prepare because of this need to feel secure, their reaction is very similar to that
of an ostrich hiding its head in the sand. The challenge for disaster managers is in how to convince individuals that they will be more secure if they prepare for hazards.

Several other researchers suggest that anxiety can prohibit individuals from preparing against disasters (Kapucu, 2008; Paton et al., 2005). Paton et al. (2005) found, from a factor analysis of surveys distributed across 600 homes in New Zealand, that certain disaster anxieties can “inhibit the person from embarking on the preparedness process in the first place” (p. 28). They noted that when earthquake anxiety was introduced into their model, there was a significant decrease in participants’ intention to prepare. Harries (2008) observed the same interaction between anxiety and preparedness, arguing that “doubts over which measure to take exacerbate anxiety about regret and increase the likelihood of inaction” (p. 22). Apprehension caused by uncertainty around how to prepare for disasters can lead to delay or outright refusal to prepare. Kapucu (2008) wrote that “when citizens believe that they are unable to implement a recommended response, or when they think it is ineffective, they may focus on controlling their fear of the risk by denying or minimizing the perceived threat level” (p. 247). An overwhelming fear of disasters can cripple a person’s ability to listen to disaster preparedness messages, and therefore they choose to not prepare for disasters.

A third reason for why individuals do not prepare is because they feel it is someone else’s responsibility (Harries, 2008; Paton et al., 2005). Harries (2008) discussed how individuals in his survey believed that the state is the “final protector of the home and the individual” (p. 16). As a result, these individuals did not prepare because they felt it is the responsibility of the state to protect them from a disaster. Paton et al. (2005) wrote, “even if favourable intentions are formed, they may not be acted on if people transfer responsibility for their safety to others” (p. 26). Kapucu (2008) also pointed out that disaster preparedness is widely considered to be the realm of
emergency managers and government officials. This misconception leads many individuals to believe it is not their responsibility to prepare.

Another group of scholars propose that people are not preparing for disasters because they do not perceive that the risk is high enough to warrant preparation (Davis, Hosseini, & Izadkhah, 2003; Paton, 2006; Sattler, Kaiser, & Hiltner, 2000). Davis et al. (2003) stated, “the ‘perception of risk’ is all important, since unless the public perceive that there is a threat to their families there is little hope of them taking appropriate measures to mitigate disaster forces” (p. 4). If individuals feel that the disaster is not a high risk and is not likely to affect them, they are less likely to prepare. Sattler et al. (2000) discussed the problem of “unrealistic optimism” in which a person thinks that they are less likely than others to be hit by a disaster or a negative event (p. 1415). In a study of two separate hurricanes, Sattler et al. (2000) found that “81 percent of participants believed the building in which they lived to be safe and able to withstand a hurricane” (p. 1403). In addition, Burton et al. (as cited in Sattler et al., 2000) also found that “in several communities worldwide over three quarters of participants denied the possibility that a natural disaster could recur in their lifetime” (p. 1415). This perception of safety and invincibility leads individuals to avoid preparing for future hazards.

Paton (2003) contends, “people may not be motivated to prepare if they do not perceive natural hazards as critical or salient issues within their community” (p. 213). This low-risk perception may come from long periods in between disasters, as well as repeated warnings without the occurrence of an actual disaster (Kapucu, 2008; Paton, 2006; Tierney, Lindell, & Perry, 2001). If individuals are repeatedly warned against disasters and they are never affected, their belief in the need to prepare against hazards will decrease. Unfortunately, most individuals who do perceive the risk associated with disasters are people who have already experienced a
disaster. Sattler et al. (2000) pointed out that “persons who have experienced a natural disaster may accrue certain benefits that promote preparation activities and attempt to minimize loss of resources during subsequent disaster threats” (p. 1398). The challenge in the field of disaster preparedness is to increase risk perception in those who have not yet experienced a disaster. To encourage disaster preparedness, officials must find a way to effectively communicate the risk of the disaster, while also recognizing that creating too much anxiety around the risk can also turn people away from preparing.

**Recommendations**

Analysts offer several reasons for why individuals are not preparing for disasters, but the literature also proposes a vast array of recommendations to encourage preparation. These include: appealing to emotions such as fear or guilt, increasing community engagement in disaster preparedness, focusing more on disaster preparedness education, better planning strategies, and more (Ablah et al., 2009, Davis et al., 2003; Kapucu, 2008; Miller et al., 2013; Rod et al., 2012; Turner & Underhill, 2012; UNESCO, 2010;). These ideas help to comprehend how to create a disaster preparedness plan that combats the problem of underprepared individuals.

Several authors suggest that the best way to encourage individual preparedness is through emotional campaigns (Miller et al., 2013; Turner & Underhill, 2006). Turner and Underhill (2006) subjected 229 participants to guilt appeals in which members of the community are made to feel guilty for not preparing their families. The findings of the study suggested that the “guilt appeals do affect the amount of guilt participants anticipated feeling if they did not take steps to prepare their family for an emergency” (p. 554). Guilt appeals were also found to increase “the perceived importance of emergency preparedness” (p. 555). The guilt petitions can target a
person’s need to take care of their family and make sure they are safe; if they do not prepare, they are harming their own families. They could also be used to make someone feel guilty for not preparing by implying that government resources will be used to help them instead of others who need it more. Miller et al. (2013) argued that “citizens who are prepared for disasters are not only a boon to relief agencies and rescue workers—enabling them to focus their early efforts on the hardest-hit areas—but also they are, perhaps more importantly, in a much better position to offer immediate help to others around them who are invariably less prepared and in greater need of assistance” (p. 11). However, Turner and Underhill (2006) also found in their study that using guilt could cause other adverse emotions, including anger. Due to this consequence, guilt appeals may not be the optimal way to encourage preparation in individuals.

Other authors discuss the potential for using fear as a possible way to increase interest in preparedness (Miller et al., 2013). Miller et al. (2013) used fear appeals on three different populations and analyzed the vested interest of the populations to prepare. The results did show a relationship between fear appeals and vested interest. Due to the increased fear, participants felt it was more in their interest to prepare (pp. 16–17). However, as shown by previous authors, there are several issues with using fright to increase disaster preparedness. If not used correctly, this could create a higher level of anxiety and, in return, lower their ability or desire to prepare. Using the emotion of fear to increase a person’s perception of the risk is a delicate task and may create unwanted results if not handled correctly. Miller et al. (2013) asserted, “a successful persuasion campaign must first assess its target audience’s needs and perceptions in order to develop the types of appeals most likely to resonate with that particular audience” (p. 17). Before fear appeals are used, it must be determined if that tactic will really resonate with the audience.
Many researchers in the literature suggest that one of the best ways to encourage individual preparedness is to increase engagement of the community as a whole (Davis et al., 2003; Cutter et al., 2013). Davis et al. (2003) proposed:

The active dialogue and direct involvement of communities at risk…is essential, recognising that patterns of vulnerability and mitigation activities are always local in character as they need to apply to local communities and their distinctive cultural values, local building traditions and specific local hazard threats.” (p. 3)

Improving disaster preparedness on the community level is vital to improving preparedness for all the individuals in the community. State and national levels are too distant to understand the needs of the individuals in the community. Cutter et al. (2013) suggested,

Disaster resilience is most effective if its development starts with the local community and its residents. In the same way that disasters are local, so too is the need for building capacity for resilience at the local level. There is a sustained need for coalitions at local to regional scales to involve the whole fabric of the community in building resilience for collaborative problem solving as they identify their hazards, debate mitigation options, communicate risk, set priorities for recovery should a disaster occur, and implement resilience-enhancing strategies. (p. 28)

If whole communities are involved in the disaster preparedness process, individuals will feel more connected to the effort and will prepare themselves as a member of that community. Paton (2003) suggested, “people with strong feelings of belonging to a place may be more likely to convert intentions into actual preparedness” (p. 213). Paton et al. (2005) found that having a sense of belonging to a community is correlated with motivations to actually prepare. While
Kapucu (2008) pointed out that “trust and relationships among community bodies must be developed before a disaster strikes” (p. 257), it is possible that feeling connected to others eliminates the anxiety of being a lone individual facing a disaster and strengthens an individual’s desire to prepare.

Community engagement in disaster preparedness can contribute to strengthening relationships and community resilience, while also generating higher levels of individual preparedness. It is also possible that individuals feel they owe it to society as a whole to prepare. In addition, if a population is highly engaged in disaster preparedness, the messages to the individuals in the community are clearer and effective. Kapucu (2008) stated, “the major function of community coordination at this stage is to communicate messages related to public preparedness as well as to educate members of the public in an effective preparations for a potential disaster and encourage them to take part” (p. 244). Several disaster scholars suggest that by engaging whole communities in the disaster preparedness process, more individuals feel the need and desire to prepare themselves and their households for disasters.

A better way to engage whole communities is through disaster education for children and young adults (Davis et al. 2003, Izadkhah & Hosseini, 2005; UNESCO, 2013; UNESCO, 2007). The UNESCO Guidebook (2010) asserted that education provides “physical, psychosocial, and cognitive protection to children, adolescents, youth and adults; [disseminates] life-saving messages about environmental and health risks; and [facilitates] a return to normalcy and overall stability” (p. 34). Scholars recognize that disaster education has high potential to increase disaster preparedness. Disaster education goes beyond a public campaign; it informs the community about the risks, how to properly prepare, and the plans that exist for the community (what organizations are in charge of which action, where the shelters are located, etc.). Izadkhah
and Hosseini (2005) contend, “education can be regarded as one of the best…media to prepare a community for disasters” (p. 139). Rambau, Beukes, and Fraser (2012) found in their study of educators in South Africa, that curriculum coordinators also believe that disaster preparedness education is crucial. One respondent noted, “disaster risk reduction is essential and should be included in the school curriculum. The integration should not only be done in Social Science, but it should include all learning areas” (p. 8). Several analysts recommended improving disaster education for school-age children, because this age group will take what they learn and return home and teach it to their families, multiplying the effects of the disaster education efforts (Fitzgerald, 2000; Izadkhah & Hosseini, 2005; Rambau, Beukes, & Fraser, 2012).

UNESCO (2007) recommended that disaster education not only include directions on how populations should prepare, but also present them with information on why they should prepare. UNESCO asserted that it is important to acknowledge, “education for disaster preparedness is an endless process that requires a constant collaborative effort from all parties concerned” (2007, p. 6). The HYOGO Framework for Action (2005) recognized how much an asset education could be to disaster preparedness, encouraging the promotion of “the inclusion of disaster risk reduction knowledge in relevant sections of school curricula at all levels,” as well as promoting “the implementation of programs and activities in schools for learning how to minimize the effects of hazards” (pp. 9–10). Disaster risk reduction education throughout the community is one of the most recommended methods for increasing disaster preparedness in individuals and creating resilient communities.

To improve levels of preparedness in communities and individuals, research shows that the best techniques are to appeal to the appropriate emotions, encourage relationships within communities and preparedness activities that include all members of the community, and
increase disaster education for all levels of society, but especially for children and youth. To further analyze disaster preparedness at the individual and community level, the next section will examine a very specific community in which disaster preparedness is becoming a more prevalent need every year: the community of higher education.

**Disaster Preparedness in Higher Education**

Disaster preparedness in education is proven to create resilient communities, but there has been less research on disaster preparedness in higher education. In the last decade, the discussion around preparedness in higher education institutions has been increasing, especially in the United States. This dialogue is fairly new but has grown in prominence due to two factors: disasters are affecting college campuses at a higher rate (FEMA, 2003) and United States institutions of higher education are now required by law to have “emergency response and evacuation procedures” (Jeanne Clery Act, 2008). More research is needed to examine the effects of hazards on higher education and how college campuses are preparing.

In 2003, the United States Federal Emergency Management Agency (FEMA) set out to provide recommendations for “Building a Disaster Resistant University.” In it, FEMA contextualized the importance of establishing institutional protocols because “in the last decade, disasters have affected university and college campuses with disturbing frequency, sometimes causing death and injury, but always imposing monetary losses and disruption of the institution’s teaching, research, and public service” (FEMA, 2003, p. iii). In addition to recognizing the increasing frequency with which disasters have affected universities, FEMA also highlighted that “higher education institutions are themselves communities in many ways, and they can draw on important lessons from the efforts of counties and municipalities to reduce disaster risks” (FEMA, 2003, p. 1). Crisis-management specialists Mitroff, Diamond, and Alpaslan (2006) also
suggested that “despite their core educational missions, colleges and universities are really like cities in terms of the services they must provide and even some of the businesses they are in” (p. 63). This emphasis on higher education institutions as a community is extremely important. It acknowledges that many of the recommendations and discussions concerning individual and community preparedness can be applied to the defined community that exists in a higher education institution. An examination of preparedness in higher education can provide insight into the effectiveness of preparedness efforts in other communities.

Higher education institutions are not only important because they are a well-defined community, but also because they are a community required by law to have emergency response procedures. The Clery Act, also known as The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (20 U.S.C. §1092(f)), was originally signed in 1990 and required disclosure of crime information across campuses. This act has become important to disaster preparedness and response because in 2008 it was amended to include the following clause:

(J) A statement of current campus policies regarding immediate emergency response and evacuation procedures, including the use of electronic and cellular communication (if appropriate), which policies shall include procedures to:

(i) immediately notify the campus community upon the confirmation of a significant emergency or dangerous situation involving an immediate threat to the health or safety of students or staff occurring on the campus, as defined in paragraph (6), unless issuing a notification will compromise efforts to contain the emergency;

(ii) publicize emergency response and evacuation procedures on an annual basis in a manner designed to reach students and staff; and
(iii) test emergency response and evacuation procedures on an annual basis. (Clery Act, 2008)

From the beginning, the Clery Act required timely warnings of events, but this clause expanded these warnings to include not only criminal issues, but also emergency and disaster warnings. The Clery Center pointed out that “an emergency response expands the definition of timely warning as it includes both Clery Act crimes and other types of emergencies (i.e., a fire or infectious disease outbreak). Colleges and universities with and without on-campus residential facilities must have emergency response and evacuation procedures in place” (Summary on Jeanne Clery Act, 2012). As communities that are experiencing an increase in disasters, institutions of higher education are now required by law to at least have emergency procedures in place, all due to the Clery Act. Not all communities are required to have emergency procedures in place, and even fewer are required to test them annually. Because higher education institutions constitute “a community” which is required by law to have a disaster preparedness plan, it is feasible to examine disaster preparedness within these institutions.

Although higher education institutions are required to prepare for disasters, there are still several challenges embedded in the process. Fillmore, Ramirez, Roth, Robertson and Atchison (2010) pointed out that disaster preparedness and response can be difficult due to the nature of university designs. They emphasized that “universities must create and execute centralized disaster response plans for a complex environment with large and diverse student and staff populations dispersed across many different buildings often over a wide geographic area” (p. 307). Mitroff et al. (2006) also pointed out, “universities' stakeholder groups include students, faculty, staff, parents, governing bodies, regulatory agencies, vendors, and athletic organizations” (p. 64). Because institutions of higher education are such complex entities,
communication issues can be a serious problem in disaster management. Fillmore et al. (2010) found from interviews of university officials that “the lack of communications coordination between departments, administrative levels, and even the county, was cited as a root cause of response problems” (p. 312). Communicating between individuals in the higher education community can often present real challenges in improving disaster preparedness and response.

Along with communication problems, several experts suggest college and university disaster management problems occur because plans are created retroactively. As discussed earlier, individuals often do not prepare because they do not perceive the risks as high, and often only begin to prepare after encountering a disaster. Higher education institutions are encountering this same phenomenon. Mitroff et al. (2006) found in a survey of 117 major universities and colleges that these institutions “were generally prepared only for those crises that they had already experienced” (p. 65). They observed that most universities had experienced fires, crime, and lawsuits, and these were the crisis they had preparations for, however they were found to be underprepared for natural and environmental disasters (p. 65). Booker, Jr. (2014) also argued, “there is a perception held by universities…that crises happen only to other institutions” (p. 17) and it is because of this that

Many institutions of higher education have written their crisis management plans after a crisis event occurred; a reactive approach to crisis that seems to typify crisis management. This reactive posture is creating environments unequipped to handle either man-made or natural disasters that ultimately threaten safety on college campuses.

(PP.17-18)

Their findings indicate that communities behave much like individuals, and that they hold an implicit belief that disasters will not harm them.
Even though higher education institutions are now legally required to have emergency response procedures, if the institution believes disasters are not a true concern, it may not go any further than meeting the minimum requirement. This can cause serious issues in encouraging individuals within the higher education community to prepare for disasters. If the community as a whole does not perceive the risks as real, it is even less likely that the individuals and stakeholders within that community will perceive the risks as something for which they need to prepare. Although the law now requires the institutions to have some sort of plan, it does not require how in depth the plan must be or how much effort the university should take to communicate it throughout the institution.

Another tension within higher education crises management is that students, an important stakeholder, are often left out of the preparedness process. FEMA argued that although students are often overlooked in hazard mitigation planning processes, their safety is “of paramount concern” (2003, p. 10). Although college and universities’ main mission is to educate and teach students, when it comes to disaster preparedness and crises management, students are left out of the planning process. Mitroff et al. (2006) found in their survey of crisis management teams that the teams included the head of facilities, heads of student and public affairs, presidents of the universities, and even the director of athletics, but missing from the teams was any actual student involvement, but missing from this list was any student involvement (p. 66). The law requires that emergency procedures be posted in a manner designed to reach students, but it does not require actively reviewing the plan with students, or asking for their participation in creating the plan.

Recognizing and engaging students as stakeholders is critical to a strong disaster preparedness policy, and in “Building a Disaster Resistant University” FEMA recommends that
“student organizations should be canvassed for potential stakeholders” (2003, p. 10). FEMA argues the importance of students in relation to disaster planning and response, stating,

Student committees often mirror the faculty governance structure and can be important sources of planning information. Students are by far the most difficult campus-based population to reach. While they do not necessarily affect critical campus decisions on risk reduction, they are the objects of it. If they are not aware of how to protect themselves in an emergency, there will be increased losses to life and property. (p. 10)

When students are not involved in the development of disaster management and preparedness policies, higher education institutions are excluding important voices from the discussion. If the students are added to the discussion on preparedness, then it will be easier to reach and engage the population of students in preparing themselves.

**Study Abroad Students and Disasters**

The number of students studying abroad every year is increasing. In the 2011–2012 school year, 283,332 students in the U.S. studied abroad (Open Doors Report, 2013). This is about one percent of the total population of students in higher education, and the number is steadily growing. This population is significant in the world of disaster preparedness because these students leave the stability of their homes and the security of a higher education institution and venture to new countries where they may encounter hazards which they are unprepared for. Hoffa, Burak, and Smithee (2001) stated that very few of the U.S. students abroad stay for more than a semester; as a result, they do not become fully connected to their new community. This leaves over 200,000 individuals traveling across the globe to various destinations with the potential to encounter different hazards, and many of these individuals do not know how to prepare or respond to a disaster. Developing disaster preparedness plans for these students is
imperative for higher education institutions, especially those institutions and organizations sending students into new communities.

There has been relatively little research on disaster preparedness for these study abroad students. While the research is minimal, there have been more calls for higher education institutions to prepare plans for study abroad students. Hoffa et al. (2001) pointed out,

The vast majority of American students who study abroad take part in programs set up and run by their own or other sponsoring institutions, domestic and foreign— that is, they are not directly matriculated into foreign institutions. This rootlessness often deprives them of the counsel and protection of foreign educational institutions. (p. 8)

This can leave study abroad students in a precarious position when a hazard strikes. Fischer (2009) discussed recommendations for study abroad programs in creating disaster management plans. Universities need to “have clear protocols for dealing with troubling situations overseas, including health scares, natural disasters, and civil strife.” The author also suggested, “plans need to be coordinated with overseas staff members, host institutions abroad, and those who provide housing to students” (Fischer, 2009, p. A24). Study abroad programs are increasingly being encouraged to develop preparedness plans for their students.

Hazards can turn into serious disasters for these students because they are in unfamiliar environments and if they choose not to prepare, the consequences could be much higher because these students have no real connection to the local community and therefore lack much needed support. Burak and Hoffa (2013) argued that students

Will not, on their own, give much thought about how to avoid potential crises or what to do in an emergency. An unprepared student can exacerbate a situation, escalating
something relatively minor into a crisis, or worsening what is already an emergency.

Informed students are crucial to successful crisis containment. (p. 173)

Just as vital as including students on campus in the disaster preparedness planning process, including study abroad students in the preparedness conversation is also vital to creating a fully prepared community.

Several researchers argue that study abroad programs in higher educational institutions need to develop more comprehensive disaster preparedness plans (Fischer, 2009; Hoffa et al., 2001). While some authors offer suggestions for how the plans should be developed and what should be included in the plans, there is very little research and discussion on how to avoid the problem of individuals choosing not to prepare. There is even less research on how to encourage study abroad individuals to prepare for disasters. The purpose of this study is to fill this void, to answer how study abroad officials in higher education can actively engage study abroad students in preparing themselves for disasters. This will be a three-pronged approach toward reaching a better disaster preparedness and management plan for study abroad students. First, recommendations for good disaster plans will be examined. Second, case studies of institutions with working disaster plans will be analyzed to determine what information is currently being given to students. Finally, a plan aimed at fully engaging students will be developed for study abroad offices.

**What makes for a good disaster management plan?**

Numerous disaster institutions and researchers give suggestions of what should be included in crisis management plans for universities (Mitroff et al., 2006; Quarentelli, 1982; U.S. Department of Education, 2013), but very few discuss management for students abroad (Hoffa et al., 2001). The U.S. Department of Education (2013) offers a simple framework for higher
education institutions or other organizations to create a comprehensive plan. They suggested that there are six stages to creating a “high-quality emergency operations plan”; these stages are forming a collaborative planning team, understanding the situation (identify risks and hazards), determining the goals and objectives, planning development (identify courses of action), planning preparation, reviewing and approval, and planning implementation and maintenance (p. 6). If a planning committee follows these six steps, they should be able to create a complete plan which,

Incorporates all courses of action to be accomplished for all selected threats and hazards and identified functions; Integrates the needs of the whole…community; Provides a complete picture of what should happen, when, and at whose direction; Estimates time for achieving objectives, with safety remaining as the utmost priority; Identifies success criteria and a desired end state; and…the plan must comply with applicable states and local requirements because these provide a baseline that facilitates both planning and execution. (U.S. Department of Education, 2013, pp. 27–28)

From this perspective, a complete plan should acknowledge what hazards might occur, how the hazards will be handled to avoid creating a disaster, and how to determine when the planned actions are complete.

Just one person cannot create an effective plan; it needs to involve different members of the institution and the community itself. Disaster management truly involves working together as a community and engaging those within the community. It is important to highlight that the U.S. Department of Education (2013) pointed out that when creating the planning team itself, the team “should be small enough to permit close collaboration, yet large enough to be
representative of the campus community and its families, as well as its broader community” (p. 15). For an effective plan to be created, a comprehensive planning team must be established first.

Mitroff et al. (2006) narrowed down the requirements for an effective plan to just four criteria. These authors suggested,

“An ideal disaster-management program has four essential components: 1) preparation for a broad range of crisis types; 2) mechanisms for picking up and amplifying the early warning signals that accompany all crises and are generally perceptible far in advance of the event; 3) a well-trained, interdisciplinary crisis-management team; and 4) the inclusion of a wide variety of both internal and external stakeholders in crisis plans, policies, and procedure.” (p. 62)

Similar to the U.S. Department of Education’s six steps, Mitroff et al. (2006) highlighted the importance of a good management team, identifying the types of crises and the involvement of the broad community. These are significant pieces to the planning process. A well-trained, collaborative team makes for a knowledgeable resource in creating and implementing the disaster plan. For a plan to work efficiently, one must be aware of the hazards that might be encountered and know how to react to them; responses to an earthquake are very different than those for a hurricane or a technological disaster.

Tierney et al. (2001) cite Quarantelli (1982) for providing ten key principles that should be a part of disaster planning in any organization. He asserted that disaster planning

(1) is a continuous process; (2) entails attempting to reduce the unknowns in the anticipated disaster situation, although it is impossible to pre-plan every aspect of a response; (3) aims at evoking appropriate (not necessarily rapid) response actions; (4) should be based on what is likely to happen and what people are likely to do in an actual
disaster situation; (5) must be based on valid knowledge, including knowledge of how people typically behave in emergencies, knowledge of the hazard itself, and knowledge concerning the resources needed to respond to the disaster event; (6) should focus on general principles while maintaining flexibility; (7) is partly an educational activity; (8) must overcome resistance; (9) must be tested; and (10) is distinct from disaster management, in that it is impossible to plan for specific problems that will develop when a disaster actually occurs. (pp. 72–74)

Many of these same principles have also been outlined by the U.S Department of Education and Mitroff et al. as essential to any planning process. If a collaborative, well-trained team is involved in the planning process, then the plan is likely to be based off of a more comprehensive understanding, and the team will be aware of the need for flexibility and testing of the plan. If the team has adequately identified the hazards, then that reduces many of the unknowns in the disaster. Including the community at large will help create a plan that invokes appropriate responses and is based off how people will actually react in the situation. It can be argued that the three most important steps for any plan are to assess the hazards and risks, have a well-trained and knowledgeable team, and to effectively engage individuals in the community.

Acknowledging that the planning process must be continuous and that it is also partly an educational activity are two key principles. Information about hazards and response options within the community are always changing. Due to this, effective plans should always be re-evaluated and examined. Recognizing that stakeholders can learn more about preparedness from planning is important. Tierney et al. (2001) suggest,

A plan should be thought of as having at least two main purposes. First it provides internal documentation (i.e., within the community) or a “written contract” that reflects
all responding organizations’ agreements regarding the allocation of emergency response functions, the activation of the emergency response organization and the direction and control of the response. The second purpose is to serve as a training document. That is, rather than merely being developed and filed, plans should serve as the basis for drills and exercises. (p. 76)

If a plan is used to involve the community and educate the community to each individual’s responsibilities, then the plan could be extremely effective in creating a knowledgeable and prepared community that can prevent a hazard from becoming a true disaster. If the plan is not adequately communicated to the members of the community, and if those individuals are not engaged in the act of preparedness, then the plan is just a piece of paper that may or may not be helpful in responding to a hazard. The community must be involved in the planning process.

These steps and attributes for effective plans are focused on planning for any organization, but specifically for higher education communities. However, there are other considerations that must be taken into account when developing a plan for study abroad students and their programs. Organizations must prepare students for hazards and disasters they may encounter thousands of miles away from the home base institution itself.

Very little literature has been offered to higher education institutions on how to best prepare students for hazards they may encounter while abroad. NAFSA, the premiere association of higher education administrators, has offered one directive entitled, Crisis Management in a Cross-Cultural Setting (2001). In it, the authors argued that is very important to prepare students before traveling abroad because they often turn crises and hazards into larger disasters. Hoffa and Burak (2001), suggested that students (American students in particular) tend to have careless behavior: thinking themselves invincible, often disregarding warnings or forgetting them
altogether, and wrongly assuming that their cultural norms are the universal. They further suggested that without this perception of invincibility many crises could be averted. Students are no different than the individuals who choose not to prepare because they perceive hazards as a non-threat, but students are different in the ability to be reached directly by a good program plan.

Managing crises with study abroad students must involve both the home and host countries. Hoffa and Burak stated, “crisis affecting U.S. students abroad have to be addressed on at least two fronts: where they erupt overseas, in their foreign cultural milieu, and on the home campus in the United States, often in conjunction with other program sponsors and parents” (2001, p. 9). Both institutions should remain in contact and discuss plans that should be used in the event of a crisis. Students should be adequately informed of these plans and their response options. If students are prepared for hazards in advance, then they will be better able to manage the crisis affecting them.

Hoffa and Burak (2001) suggested that when determining how to prepare students and how to effectively manage potential problems, there are three basic principles:

the challenge to every institution is to use its legal counsel to balance a sufficient level of care without evoking claims of absolute in loco parentis status, or without exercising too much control. The basic principles seem to be to: determine what foreseeable risks exist abroad; provide information about them to staff and students; and provide support service for students that minimize the risk and maximize safety. In the case of an emergency, study abroad program administrators in the United States and abroad may be the only resource available to support students. (2001, pp. 168–169)

Individuals cannot be entirely controlled and must use their own judgment. However, the study abroad program can provide the resources to support individuals. Study abroad programs must
find a way to communicate the information about risks in such a way that will encourage students to be less naive and to actually prepare. As Hoffa and Burak (2001) stated, “informed students are crucial to successful crisis containment. Campuses and programs do best when they not only educate students about avoiding trouble, but about what their response should be in the event of crisis circumstances” (p. 173). Study abroad programs need to create a plan for disasters that might occur, but they must go further to communicate this to students.

Hoffa and Burak (2001) provided recommendations for what must be included in a plan that is specific to study abroad crises. They suggest that to be fully prepared for a study abroad crisis, the organization should have a plan in place, a preexisting response team, a 24-hour telephone answering system, a required orientation for any staff leading the program, communications procedures for how the receiving institution should alert the home organization and parents about the emergency, a required orientation program for all participants, a list of emergency organizations’ phone numbers and websites, and emergency evacuation insurance for all participants (p. 177). Similar to the conditions given by other authors, emphasis is put on the criteria of having a knowledgeable team pre-selected and trained (with orientation). Two suggested pieces of the plan specific to study abroad students are a 24-hour hotline and the necessity of emergency evacuation insurance. Of additional importance is mandatory orientation for all participants. It is important to note that this is not just an orientation concerning where the student is going and what to expect, but should include “specifying potential dangers, expected behaviors, and contingency responses in times of emergencies” (2001, p. 177). The more informed the students are, the more likely it is that they will respond accurately in a crisis and not create further problems.
Establishing communications procedures is a critical step for emergency operations plans and is of even greater importance for study abroad students. Paltalla, Boano, Lund, and Vos (2011) found in a survey of disaster management officials, that there are often serious communication gaps during disasters. Several participants pointed out, “in practice, information often is not timely, or at other times, it is not clear who is supposed to send information and who is the primary target of it.” Respondents also mentioned, “different communication styles cause misunderstandings and problems” (p. 6). These problems in disaster communication can be even more serious when dealing with students thousands of miles away. It is imperative that a study abroad emergency operations plan put a clear communications protocol into place. This includes identifying who is supposed to send out information, how the host institution and home institution will maintain contact, who students need to contact, and whom parents should contact. There needs to be a clear communications procedure, and it should be explained to students to avoid creating mass confusion.

Several authors explained the steps involved in creating a good disaster management plan; however, in most resources there is little discussion on how to create a plan that actively engages the individual (in this case the student) in preparing themselves. Programs are encouraged to educate the students in many ways: verbally, in writing, and online. It is important to repeat the information as much as possible. Currently, there is no literature or suggestion on how to get students to actively think and participate in their own preparedness. This research argues that the best possible disaster preparedness plan is to involve students in not only a top-down information download approach, but to create activities that encourage the student to think and take their own preparation actions. Most plans do not involve bringing the individual into the
planning process. This culminating project will work towards the goal of creating a preparedness plan that includes the individual in the preparedness process.

**Methodology**

The literature demonstrates that improving disaster preparedness in communities is vital in today’s world. It also illustrates that there are problems with engaging individuals in their own preparation. Furthermore, there is a gap in the research as to how to prepare students for hazards they might encounter while studying abroad. This research works to answer how study abroad officials in higher education can actively engage study abroad students in preparing themselves for disasters abroad. This culminating project uses qualitative research, in conjunction with a proposed intervention, to suggest potential ways to engage students in preparation. The qualitative research analyzes how several universities are currently informing all students about disaster preparedness. The next step of the research was to create a proposed intervention specifically for engaging study abroad students in disaster preparation. This proposed intervention focuses on a workshop and student activities that encourage study abroad students to prepare themselves before going abroad. Through the analysis of other university’s plans and the creation of a new preparation plan, I hope to develop an example of how to actively engage individuals in the preparation process.

The purpose of analyzing case studies of universities is to determine what emergency preparedness information is currently being provided to student body as a whole. For this, each university was examined by website analysis to determine their level of outreach to students concerning disaster preparedness. As one of the most common ways students and populations look for information is via the Internet, I chose to examine what information was available on the universities’ websites. First, I evaluated each on the ease of student accessibility to the
emergency page. For the purpose of this study, accessibility is defined by how easily a student can find emergency preparedness information. Criteria for evaluating accessibility included whether there was a link on the main university page to the emergency site, if there were links via student resources (student life, student service, etc.), or if the information was only accessible from faculty/staff pages. Each university was graded on a scale of 1–5, where 1 = no emergency information provided at all, 2 = emergency information available only through faculty or staff pages, 3 = emergency information can be found by following three or more links from the main university page, 4 = emergency information can be found by following one or two links from the main university page, 5 = emergency information is provided on the main university page.

Second, I analyzed the depth of the information provided on each university website. Depth is defined by how complete or thorough the emergency preparedness information is on the university website. The criteria for depth of information included how much information was provided, was it provided in multiple formats, the level of detail of the instructions, and if there was mention of off-line activities for students to learn more about disaster preparedness. Again, each university was graded on a scale of 1–5; 1 = no information provided at all, 2 = basic emergency procedures provided (instructions on how to act in only one scenario, evacuation route provided), 3 = detailed emergency procedures provided (step-by-step instructions for how to act in multiple scenarios, evacuation route, who to contact in the event of a hazard, where a student can find up-to-date emergency information, etc.), 4 = information includes detailed emergency procedures, multiple formats for information (online, in classroom materials, phone applications), but no mention of off-line activities for students, 5 = information includes detailed emergency procedures, multiple formats for information (online, in classroom materials, phone applications), and mention of off-line activities for students.
After the case studies were analyzed, the second step of the research was to improve the information some universities are currently giving to students. I present a proposed intervention for how to not only inform students, but also how to actively engage students in disaster preparedness. This proposed intervention is focused on targeting a specific subset of students in higher education: study abroad students, and involves a workshop and activities that aim to counter the problems of individual preparedness and actively engage students in their own preparation against hazards.

**Case Studies**

The first step in the research process was to choose current university emergency preparedness strategies and then analyze how this information is being provided to students. The case studies were examined to create a more complete picture of what already exists and works, and to understand what should be used to create a comprehensive plan for a study abroad organization. The universities I chose to examine were participants in the Federal Emergency Management Administration (FEMA) grant program aimed at creating disaster resistant universities (FEMA awards, 2004). In 2004, FEMA awarded

More than $3.2 million in grants as part of FEMA’s Disaster Resistant University (DRU) program. The DRU program assists universities and colleges, through State and local governments, to implement a sustained pre-disaster natural hazard mitigation program to reduce the overall risk to students, faculty, facilities and research assets. (FEMA, 2004) FEMA stated that the program acknowledges:

Damage and interruption to the institutional mission can result in significant losses that can be measured by faculty and student departures, loss of irreplaceable research assets,
decreases in research funding and increases in insurance premiums. The DRU program is designed to lessen or eliminate such losses. (FEMA, 2004, p. 1)

I chose to analyze universities that were part of the grant program because they received financial assistance and showed a desire to improve their disaster policies simply by competing in the grant process. The five universities I chose were: Tulane University, the University of Louisville, the University of Central Oklahoma, the University of California at Berkeley, and the University of Oregon. Three of the universities were part of the 2004 grant distribution process (Tulane, University of Louisville, and University of Central Oklahoma). The University of California at Berkeley was active in working with FEMA to fund and develop the Disaster Resistant University Initiative (Comerio, 2000, p. 1). The University of Oregon was not actually a grant recipient, but its emergency management department was responsible for developing the Disaster Resilient University Community of Practice “to facilitate open communication, discussion, and resource sharing between university/college emergency management practitioners charged with making…campuses more disaster resilient” (Disaster Resilient Universities, University of Oregon, 2012). For this reason, I chose to include the University of Oregon in the case study analysis as well.

As indicated in disaster-related literature, individuals are generally unprepared for disasters due to ignorance on how to prepare, apathy, and/or feelings of security. The problem that most universities exclude students in the planning of disaster related protocols was also cited in the literature. To determine how each university chose to address individuals in the community, but especially the students, each university was analyzed—via its website—by the information being provided to students. A summary of the case study ratings for each university is provided in Table 1.
Table 1: Case Study Findings

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Case Study 1: Tulane University

Founded in 1834, Tulane University is located in New Orleans, Louisiana, and is a “member of the prestigious Association of American Universities” (About Tulane, 2014). In 2014-2015, Tulane had a student enrollment of 13,531 undergraduate, graduate, and professional students (Facts, 2014). Tulane was not only a member of the 2004 grant recipients, but also participated in the pilot group to start the Disaster Resistant University Initiative (Tulane University, n.d., Disaster Resistant University). Tulane is important because in 2005, Hurricane Katrina hit the university and the school had to shut down for four months (Tulane University, 2014). Tulane states that they now strive “to connect its values and mission to the needs of the city of New Orleans, the state, and the nation. Community involvement is now more important than ever as the university participates in the rebirth of New Orleans” (About Tulane, 2014). Not only is Tulane important as a university community, but it is also the largest employer in New Orleans. Tulane is significant because of how disaster preparation plans have evolved almost 10 years after deploying a plan that involved evacuating all of its students from multiple campuses.

Overall, Tulane has fairly accessible emergency information on its main website for students. There are multiple methods in which a student could access Tulane’s emergency management information. The fastest method involves following two links on the university’s
website. The first link is located on the main university webpage and is called Gateway for Students. After clicking on this link, there is a section on the Gateway for Students page entitled Emergency Information, which includes several links to information about emergency policies and preparedness. It is vital to note that emergency preparedness is included in the student section, meaning the university is providing access and emergency preparedness information to students directly. Tulane is graded a 4 because the information is accessible by following two links, but there is not a direct link to the emergency procedures via the university main page.

After determining the ease of access to Tulane’s emergency procedures page, I then looked at the depth of information provided to students about emergency preparedness. From Tulane’s Emergency Management page, there is access to a breadth of information on emergencies, including specific instructions for how the university will alert students and contact them if a disaster occurs and a listing of procedures for 14 potential hazards (including hurricanes, tornadoes, fires, and medical emergencies). Each procedure states what individuals should do and what actions the university will take. While none of the procedures specifically discuss students, the Hurricane Procedures and Information section does have a link to the Tulane Hurricane Guide for Students, which provides information on how students can stay informed, prepare and respond to the storm, how and where to evacuate, and what to do afterward (Hurricane Guide For Students, 2014).

In addition to this information, the university has a campus alert system used to reach students by email, voice, or text messages. This is a valuable way to communicate with students, but it is only used to contact students “in the event of an emergency or impending threat” (Emergency Communication Systems, 2014). While it is very important in the case of emergencies, it is not used to encourage students in preparation. Tulane also provides
information via Twitter for students who choose to use the social media tool and sign up for the messages provided by the university. Along with these platforms, under the DRU initiative, there was mention of planning disaster and hurricane related programs and training to deliver to students during orientation (Disaster Awareness and Training, n.d.). It is possible that these trainings have been developed and are being delivered to students, but there is no further discussion of these on the website.

Tulane ranks a 4 on the depth of information provided to students due to the emergency preparedness information on Tulane’s websites detailing procedures for multiple scenarios and mentioning several platforms where students can receive information. Tulane may be developing new ways to communicate disaster preparedness to students, but currently, the main source of information for students is the emergency management webpage. Tulane provides accessible and in-depth information about emergency preparedness to its students.

Case Study 2: University of Central Oklahoma

The University of Central Oklahoma (UCO) is located in Edmond, Oklahoma, and serves over 17,000 students across a 210-acre campus (About University of Central Oklahoma, 2014). It was the “first university in the state of Oklahoma to hire a full-time emergency management coordinator to handle emergency management issues on campus. UCO is also the only university in the state of Oklahoma to have its Disaster Resistant University (DRU) grant approved by the Federal Emergency Management Agency” (UCO Emergency Management, 2014). UCO was awarded $75,000 by FEMA as part of the DRU grant program.

At first analysis of how easily accessible emergency information is to students online, the University of Central Oklahoma ranks very low. There is no connection to the Emergency Management page from the university’s main page. For an individual to find the emergency
management page, one had to follow two links via the Faculty and Staff section. While it may take faculty or staff only a few clicks to reach the information, there is no link for students unless they are purposefully searching for emergency management. This lack of a direct link to the emergency information does not encourage students to research hazard preparation. UCO is graded a 2 because emergency information exists, but it is only accessible through faculty and staff pages.

Though UCO does not have highly accessible information for students, they do have a depth of information on emergency preparedness. They provide links to “Red Cross Ready” pamphlets for different hazards, as well as a link to an emergency preparedness guide for the university. This guide reviews and outlines procedures for 13 hazards and includes protocols such as evacuation procedures, tornado procedures, shelters on campus, and first-aid procedures. The introduction to the guide states:

Safety is everyone’s business. This booklet can help you to be better prepared in the event of an emergency. It represents only a small part of our commitment to your safety and the safety of all who visit our campus. Please review it, and also become familiar with the Emergency Preparedness Guides that have been placed in classrooms, labs and offices throughout campus. (Emergency Preparedness Guide, n.d., p. 2)

This acknowledgement that safety is everyone’s business along with the proliferation of the guide throughout campus reveals that UCO is making efforts to include students in preparation procedures.

Along with distributing the emergency preparedness guide across the campus, UCO’s website mentions several other ways in which students can access information and learn about disaster preparedness. The Emergency Management page has maps and the locations of shelters
on campus, this information is very important to any individual trying to prepare in advance for hazards in determining their personal course of action. The University also has a Central Alert system to access students via e-mail, text, and voice messaging.

UCO’s emergency information mentions that the university has started the process of gathering together a Campus Community Emergency Response team and offering Free National Incident Management System classes. The campus emergency team “trains individuals in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations” (Campus Community Emergency Response Team, 2012). The free classes are used to “improve the relationship between UCO and local community public safety partners and significantly enhance [the] institution's ability to deal with emergency situations” (NIMS/ICS Training, 2013). While these programs may be directed at faculty and staff, the announcement suggests any individuals on the campus community can join. This is a new way to bring students into the preparedness process: encouraging them to join a campus-wide response team or take free classes on emergency management.

The website also states that in 2012, the Emergency Management Unit at UCO “conducted the university’s first-ever “Shelter-in-Place/Lockdown” exercise. The exercise consisted of all Central faculty, staff, students, and visitors practicing the procedures that would take place in an actual shelter-in-place/lockdown situation” (UCO Emergency Management Unit, 2014). Conducting an emergency exercise that includes all faculty, staff, and students ensures that students prepare, because they are required to act out what would happen if a disaster occurred requiring shelter-in-place, such as a tornado, earthquake, or an active shooter.

The University of Oklahoma achieves a rank of 5 for the depth of information provided about emergency preparedness. It provides key elements in preparing students and providing
valuable emergency preparedness information, but because the accessibility for students is so low, it is unlikely that many students will find this information. UCO could prepare students better if the emergency preparedness information was easily accessible to students on the website.

Case Study 3: University of Louisville

The University of Louisville is a state-supported research university that has three campuses, which includes two campuses that are over 200 acres (About the University of Louisville, 2014). In 2013, the student body included 22,529 students, including undergraduate, graduate, and post-doctoral students (Profile, 2014). As part of the DRU grant program, FEMA awarded the University of Louisville $94,958 (FEMA, 2004).

When compared with the other cases, the University of Louisville has the most direct online access to a university’s emergency procedures. At the bottom of its main page, there is an Emergency link that takes users directly to information about their emergency alert system; there is an additional link to emergency procedures on the left. This site is also accessible under student resources. The direct and easy access to information shows an effort to provide information to the community, but also to makes the information readily available to students. The University of Louisville receives a grade of 5 for accessibility.

The University of Louisville emergency information website has a wide variety of information for all individuals on campus. There is a list of emergency procedures that gives individual steps of what one should do for 21 different hazards. In addition to emergency procedures and plans, there is a section on “preparing for emergencies” in which there are 19 guides on how to prepare for different hazards or crisis problems. What is unique to the University of Louisville’s emergency information website is that it repeatedly states that
“preparing for emergencies is everyone’s responsibility” and that “preparation for disasters is an ongoing activity and begins with the individual” (Preparing you for emergencies, 2014). This acknowledgement recognizes that all individuals in the campus community, including students, should be incorporated into preparedness activities.

Other formats used by the University of Louisville to reach students include alert systems, posters, presentations, and trainings. All emergency links from the main page go directly to information on the campus alert system through which students can receive text messages and emails concerning emergencies on campus. Also listed in the procedures section is a sample of posters placed in classrooms to inform faculty and students of what actions to take in various hazardous situations.

Along with these platforms, the emergency management department offers free trainings and presentations. They state that “the Office of Emergency Management can customize a training for your department or building providing lecture/discussion training, functional and tabletop exercises” (Training, 2014). Though faculty and staff must request these trainings, it is possible that they could also be used to reach students and could be very useful in continuing work toward the belief that it is everyone’s responsibility to prepare (including students).

The University of Louisville achieves a 4 on the depth of information provided to students. While the university does provide multiple procedures for different scenarios and states that there are several platforms in which students can find information, there are no off-line activities mentioned specifically for students. The office of emergency management does offer trainings, but faculty and staff must request these. The University of Louisville can improve the depth of information provided to students by using the website to notify students about off-line activities.
Case Study 4: University of California at Berkeley

The University of California at Berkeley was originally established in 1868. “UC Berkeley occupies a 1,232 acre campus with a sylvan 178-acre central core” and in the fall of 2013 had “36,204 students…including 25,951 undergraduates and 10,253 pursuing graduate degrees” (Facts at a Glance, 2014). Berkeley is a very significant case study because this university was not given a grant by FEMA, but actually helped to fund the development and research of the DRU initiative (Comerio, 2000). As the University that helped to start the DRU program, it is important to review and analyze what steps Berkeley has taken to prepare students for hazards on campus and abroad.

Berkeley has fairly easy access to its emergency procedures page. On the scale they rank a 4, because the information can be reached from the main page by following one link, which is found under “Quick Links.” However, it is important to note that the link is second to last on the list and does not immediately stand out to a person looking for information. This page has information on warning signals, campus maps, and the alert system, but a student has to click on the Office of Emergency Management link to find information on emergency preparedness. Easier access under the student section of the webpage is likely to gain more students’ attention and have them review the emergency information. It is also slightly confusing to have emergency preparedness information listed in an entirely different section (Office of Emergency Management) from the Emergency page. It would be better to streamline all of this information and to post it on the main university page.

Berkeley has great depth of information available to students. Within the Emergency Operation Plan on the website there is a section called Multi-Year Training and Exercise Plan that includes students as part of the program. One priority listed is to “enhance awareness of
hazards and threats that may affect the campus and increase preparedness for emergencies by including non-response faculty, staff, and students in outreach, training and exercise planning, and execution, as appropriate” (Multi-Year Training and Exercise Plan, 2014, p. 5). This shows that the university recognizes the need to include students in planning and preparation.

In addition to the training plan, the resources on Berkeley’s website mentions plans to include students in Community Emergency Response Training, Preparedness Seminars, Red Cross Club on campus, and trainings during Incoming Student Orientation (TEP, 2014, p. 10). Along with trainings and seminars, Berkeley has a smart phone app developed specifically for connecting all students to the campus-wide alert system and provides accessible information on a platform that many students are constantly using: their smart phone. The system outlines ways to prepare (including a go-bag checklist, how to make an emergency plan, and ways to be ready), a procedure and emergency contact information for 11 hazardous situations. The app does not just warn students of emergencies on campus, it also provides ways for students to prepare for and be informed about hazards in general. Two limitations of this strategy, of course, are that not all students have a smart phone and that in the case of a severe emergency, phone services may shut down and the app will be inaccessible. However, it is a great resource for students to use to prepare.

Overall, Berkeley is strategic in its inclusivity of students in the university’s disaster preparedness framework. They score a 5 on the scale for depth of information and the sizeable amount of resources for students. What is especially notable about the resources provided to Berkeley students is that the university has been very innovative in tailoring information to students, especially in the case of the disaster preparation phone app and a go-bag checklist that is easy for students to maintain.
Case Study 5: University of Oregon

The University of Oregon is located in Eugene, Oregon, on a 295-acre campus (About the University of Oregon, 2014). In the fall of 2013, the university had a total of 24,548 students including undergraduate and graduate students (UO at a glance, 2014). The University of Oregon was not a participant in the DRU initiative developed by FEMA, but was included to provide a perspective from a university that did not receive funding from FEMA and because the University of Oregon Office of Emergency Management hosts the listserv for Disaster Resilient Universities (Disaster Resilient Universities, 2012). This listserv was created “for university and/or college emergency management professionals to share information and engage in discussions and dialogues related to the profession and emerging issues around campus emergency management” (Disaster Resilient Universities, 2012). Due to these factors, I chose to include the University of Oregon in the case studies.

In analyzing the University of Oregon’s Office of Emergency Management webpages it becomes clear that the information is not easily accessible to students. There are no links on the main page to the Emergency page, there are no links under the Current Student section that lead to the Emergency page, and under the A-Z section it is not listed under Emergency Management (clicking on Enterprise Risk Services will take you the Emergency Management page). Unless a student is specifically searching for emergency procedures, there are no links. To encourage more student engagement in disaster preparedness, the University of Oregon should change the web page to have the information much more accessible and noticeable for students. On the scale, the University of Oregon is graded a 2 because there is information available, but it is very difficult to find.
Once one does reach the Emergency Management page, there is a great deal of information on emergency procedures available to individuals. There are 14 different emergency procedures ranging from earthquakes, explosions, and fires, to evacuation and shelter-in-place procedures. Each procedure lists actions an individual should take before, during, and after an emergency event. There are also links to general preparedness guidelines. The page clearly states,

The University is committed to the welfare of its community (students, faculty, staff, and visitors) and to preserving the institution. To fulfill its mission and commitments in the event of a disaster, the University should strive to become disaster resilient. Disaster resilience is achieved through awareness, training, and action. (Planning Resources for Departments and Units, 2012)

This demonstrates that the University recognizes that all individuals should be included in the preparedness process.

The emergency management page also has a link to Personal Resources, which discusses the benefits of preparing for emergencies. This section has links to creating an individual disaster plan, building a disaster kit, resources for different stakeholders, including a specific resource page for students (Personal Resources, 2012). The resource list provides specific ways that students can prepare themselves for a variety of hazards (Resources for Students, 2012). While there may not be a direct link to the Office of Emergency Management for students, there is a depth of information directed towards students on the page. The University of Oregon does recognize in some part the need to prepare students for the different hazards they might encounter on campus.
The University of Oregon is not only trying to reach students by providing resource pages, but also uses several other formats to inform students on how to prepare. There is an alert system that reaches students via text message and email in the case of an emergency and the website shows that the U of O has an emergency procedures flipbook that is distributed across campus with the goal of providing “a guide for thinking about disasters before, during, and after they occur for University of Oregon students, staff and faculty members” (University of Oregon, Emergency Procedures Flipbook, p. 1). The flipbook goes over the emergency procedures, including important contact information as well as how to take action and prepare in advance.

In addition, the website also states that they provide personal preparedness trainings to any department that requests them. These trainings are mainly directed at faculty and staff, but it is possible that these trainings are, or could be, used to inform students about disaster preparedness. Finally, the website also mentions the creation of a Campus Community Emergency Response Team which students could join to learn more about preparation activities.

The University of Oregon encourages its students to create their own preparedness kit. Instead of just providing a list, the university sells preassembled preparedness kits at the campus store (Resources for Students, 2012), which includes a “Drawstring backpack, 3 water bottles, Calorie foods, Emergency blanket, Poncho, N95 dust mask, Hand sanitizer, Flashlight with batteries, Whistle, and Hand warmers” (UO Emergency Kit, 2014). Having a complete, preassembled kit available to students creates an easy way for them to obtain a preparedness kit and complete one step in preparing for a disaster. Although at the time of this investigation the item was out of stock, the idea of making a preparedness kit available to students remains a strategic and innovative way to reach them.
The University of Oregon achieves a 5 on the scale for the amount of information provided to students. They provide procedures for over 14 disaster scenarios, mention of multiple formats in which students can find these resources, and mention of off-line activities through the Campus Emergency Response Team. The University of Oregon is very innovative in reaching students through the campus emergency flipbooks and the premade preparedness kits available for purchase. If the online information were as accessible as the off-line, the university would be providing a fully comprehensive method of reaching students on multiple levels.

**Discussion of Case Studies**

The case studies provide valuable evidence about how campuses are currently providing emergency preparedness to their students, showing that several universities are acknowledging the need to fully include students in preparing themselves in order to create a truly disaster-resistant university. Several universities have created easy access on their website for students to find information on emergency procedures and preparedness, while other universities have emergency procedures and plans aimed directly at students and helping them to prepare. Universities are beginning to recognize that a great emergency operations plan is not effective if the students are not also included. The case studies show that the universities are using several platforms to engage students in preparing for hazards including through technology, in-person orientations and trainings, manuals and posters spread across campus, etc. While it appears that the five case studies were designed by and for faculty, it is possible that the universities may have had some student input in the disaster plan design. However, what is missing from the case studies is a way to engage students in their own preparation process. After analyzing the information and resources that are currently being provided to students, I recommend that steps
be taken to engage students in activities that encourage them to actively participate in their own preparedness.

Several of the platforms used by universities (trainings, manuals, preparedness kits, etc.) could easily be translated to encourage study abroad students to prepare for hazards. All of these universities are working towards becoming Disaster Resistant (or Resilient) Universities, but for a university to have a truly disaster-resistant community, students going abroad must also be included. As these students are spread across the globe, there is a greater chance that they might encounter a hazard than students at home. I propose that by applying some of the techniques used by universities to engage on campus students, a disaster preparedness plan for study abroad students can be created that actively engages the student in preparation.

**Proposed Intervention**

Throughout the literature, there is a void in addressing how to prepare study abroad students for hazards they may encounter while abroad. There are several resources available, but there is no discussion on how to avoid the problems of individual preparedness among study abroad students. I propose that by creating a fully comprehensive preparedness plan, organizations can move past the problem of “general public complacency” (Kapucu, 2008) for this specific subset of individuals. Universities and study abroad organizations have the ability to train these individuals in preparedness, and the rare opportunity to require that students attend these trainings or orientations and participate in individual preparedness. A comprehensive preparedness plan will ensure that all students receive the appropriate disaster education, which can help the student obtain awareness of the risks they may encounter and potentially override the feeling that one is invincible. I propose that a fully comprehensive study abroad disaster preparedness plan has four components:
1. A page on the study abroad website providing disaster preparedness resources.

2. An interactive workshop on disaster preparedness.

3. A requirement for all students to complete their very own individual emergency action plan.

4. A small companion guide that students can keep with them at all times with a list of contacts and pertinent information on emergency procedures.

These four steps aim to reach students via technology, in person, and on paper. Each section of the plan also attempts to eliminate the problems of individual complacency, lack of preparedness knowledge, and the feeling of security that often prevents individuals from preparing (Paton et al., 2005; Davis et al., 2003,). By attacking hazard preparedness from all sides, it is possible to create highly prepared students and a more resilient community.

Before discussing the proposed intervention of a student disaster preparation plan, it is important than any organization define a clear Emergency Operations Plan, addressing how the organization will respond and react to disasters. For study abroad organizations, they should have at the least, communication procedures (how the office can be contacted, who will be in charge of directing responses, who will be in charge of ensuring student safety), and evacuation procedures if needed. Study abroad offices and organizations should also develop a plan of action if communication lines go down in the country where students are located. If communication does go down, it may be some time before the office is able to obtain a clear picture of what is happening on the ground. Along with having an emergency plan mapped out for the home office, study abroad offices should ensure that host sites have plans that include an analysis of potential hazards, how those hazards will be handled to avoid disaster, and how to determine when the planned actions are complete. Ideally, the host site will map out a plan
specifically for the visiting students as well. To have a truly prepared community it is important that the study abroad office or organization stay in communication with host sites to discuss and stay up-to-date on the host sites’ emergency operation plan. Prepared individuals form a prepared community, but a fully prepared community also encourages individual preparedness (Reich, 2006). Due to the fact that most study abroad programs do not have staff at all locations, it is crucial that study abroad students be adequately prepared for hazards before leaving the United States. That is why I am proposing a comprehensive disaster preparedness plan for the study abroad student.

**Step 1: Provide Disaster Preparedness Resources on the Study Abroad website**

In the case studies, students’ access to information on the university website was an important variable. I suggest that the first step in creating a truly prepared study abroad student is to provide resources on the organization’s website about how to prepare for different hazards. A study abroad website should meet the criteria in the case studies for having accessible and in-depth information. Study abroad offices should have a link to the emergency procedures for students abroad accessible on the main study abroad page and, if at all possible, available on the main university page. The website should also provide: in-depth information by providing procedures for multiple scenarios such as those listed on Tulane University or University of Berkeley’s website; access to information in multiple formats like the flipbooks or posters used by the University of Oregon and the University of Central Oklahoma; and mention of off-line activities, such as the emergency preparedness trainings mentioned by Berkeley and the University of Louisville. The final three steps of this proposed intervention are forms of off-line activities that study abroad offices can use to engage students.
The study abroad website should also provide links to the U.S. Department of State, the Center for Disease Control, and information on travel insurance. The study abroad student handbooks on Studentsabroad.com also deliver country-based information on hazards that may be encountered. Studentsabroad.com also gives information on crisis management for students while abroad. Ready.gov is another resource with valuable information on how to prepare for hazards, how to make a plan, and how to create a preparedness kit.

Another critical resource to include is a go-bag (or preparedness kit) checklist, such as the one found on the University of California, Berkeley website (see Appendix A), or information about a go-bag like the one sold to students at the University of Oregon. These resources provide students with a vast amount of information on how to prepare for different hazards, but only providing a list of resources does not guarantee that students will do the research and become fully prepared. Step two addresses how to actively involve students in thinking about preparedness.

**Step 2: Disaster Preparedness Workshop**

Several universities are beginning to include students in disaster preparedness trainings and workshops in an effort to become fully disaster-resistant universities, which is why the second step of this proposed intervention is to require students to attend a disaster preparedness workshop. The workshop should be separate from basic study abroad orientation because, generally, a vast amount of information is reviewed at study abroad orientations, leaving only a small portion of time to discuss disaster preparation. To fully engage students in disaster preparedness, a separate, specific time should be set aside for a disaster preparedness workshop. I suggest that this workshop include five parts: a) discussion on the meaning of a disaster, b) discussion on the ever-present need to prepare, c) scenarios on problems that can occur during
hazards, d) tips on how students can prepare themselves, and e) discussion around what to do after a disaster occurs. Each of these five steps aims to address problems of individual preparedness.

Discussing the definition of disasters and providing tips for preparation helps to ensure that individuals do know how they are supposed to respond to a disaster and how to prepare themselves, avoiding the problem of a confused public (Kapucu, 2008; Redlener & Berman, 2006). Discussing the ever-present need to prepare, and presenting scenarios where problems occur during hazards, aims at trying to increase a student’s “perception of risk” (Davis et al., 2003) and at lowering “unrealistic optimism” (Salter, Kaiser, & Hiltner, 2000). The workshop is also a form of disaster education, whose goal is engaging the whole community of study abroad students; two recommendations made frequently in the literature (Izadkhah & Hosseini, 2005; Davis et al., 2003). It is also vital that the workshop be interactive and not stagnant; it is an opportunity to begin including students in the action, not just having them sit and learn as bystanders.

As part of this proposed intervention, I created a workshop specifically for IPSL, LLC, a study abroad and service-learning organization which progressed through each of these five components. I presented a pilot of the workshop to several IPSL graduate students and staff. Some of the information in the workshop was specific to the three countries the graduate students can work in, but could easily be adapted to other groups. The PowerPoint presentation of the workshop can be found in Appendix B. I stated at the beginning of the workshop that the primary goal was to give tips and ideas about how to prepare as individuals for disasters, but more importantly, was to start a conversation concerning disaster preparedness. A secondary goal of the workshop was to bring awareness of disaster preparedness needs and to begin
collaboration, which is important in working toward creating a community of preparedness, and helping students feel that they are part of the community, by engaging and learning how to prepare. Paton et al. (2005) discussed that individuals who feel part of a community are more likely to prepare; therefore, starting the workshop with a goal of collaboration was targeted toward creating a feeling of community and ownership in the workshop.

After the introduction, the first item I introduced was the definition of ‘disaster.’ There is no agreement in the literature on what constitutes a disaster, but for one to truly prepare for one it is important to start thinking about what the word even means. Discussing the definition of ‘disaster’ was aimed at having participants think about disasters and hazards and what they mean for them personally. Participants were asked how they personally defined disasters and then asked to comment on whether different scenarios such as an epidemic, a city blackout, or conflict/war were considered disasters. After this discussion, I reviewed several definitions concerning disaster in the literature and presented Shaluf’s disaster tree model (2007). Again, this was to begin discussion about what people consider a disaster, and the ideas around natural, man-made, and hybrid disasters (Shaluf, 2007). For individuals to prepare for hazards they must begin to think of what these definitions mean.

The second piece of the workshop was to discuss the pervasive need. As mentioned above, this section was targeted at increasing “perception of risk” (Davis et al., 2003) and lowering “unrealistic optimism” (Salter, Kaiser, & Hiltner, 2000). In order to do this, I presented several slides of information from the International Red Cross and Red Crescent World Disaster Report (2013, 2014). The slides provided statistics on the number of reported disasters in the world, the number of people affected, and the cost of disasters. The numbers in each of these sections are fairly high and are separated by continent, as well. The purpose of this exercise was
to show that with these high numbers, the odds of being affected by a disaster are greater than one might think, and that the odds increase when traveling across continents. I also focused on the cost of disasters because studies now show that disasters are costing billions of dollars and affecting economies far from the source of the disaster (UNISDR, 2013). The function of the discussion was not to create fear, but to emphasize that statistically, there are real odds that a person will be in a disaster at some point in their lives, which emphasizes the need to prepare for hazards. I hoped that through presenting these numbers, students would have an increased perception of risk and a feel the need to prepare.

The third piece of the workshop was an interactive game in which students were split into teams and sent on a “choose your own adventure” quest. A scenario of a student being abroad when a tsunami warning was issued was presented to students; they were then given options of actions to take which led them to a new scenario (cards placed in different areas of the room). The goal of the game was to reach the “shelter” the quickest; they were given 30 seconds at each card to choose their next step. There were several pitfalls along the way and no easy route to reach the shelter. The idea behind this game was to show students that real problems can occur when disasters happen and reaching shelter is not always easy. After the game, I led a discussion among participants of how they felt during the game, how things could have been improved, and if students had known how to prepare in advance would they have felt more confident, safer, etc. I also pointed out that several of the problems that were listed on the cards were from personal experience, emphasizing that this could be (and was) a real life scenario. This scenario game was targeted at lowering “unrealistic optimism,” (Salter, Kaiser, & Hiltner, 2000) as well as demonstrating the need for preparing against hazards. Having students participate in an
interactive game such as this really helps to put the student in the hazard mindset and gives them an example of how prior preparation could be very helpful.

The second and third steps of the workshop aim at increasing perception of risk and lowering unrealistic optimism, but it is not designed to create fear or pessimism. Step four provides tips on how students can prepare in order for them to take responsibility as individuals and feel secure armed with a plan for preparation. For the workshop, I discussed the importance of having a plan, knowing the plans of local/city governments, provided several resources to research preparedness information (such as fema.gov, ready.gov, local news or radio stations, etc.), and discussed the need for a preparedness kit. I went on to discuss the U.S. Department of State’s Smart Traveler Enrollment Program (STEP), but pointed out a few drawbacks in the program (the Department of State is often not directly at the site of the disaster, evacuation is a last resort, and you can be charged for evacuation) (U.S. Department of State, n.d.). I also noted resources for analyzing and reviewing hazards that can occur in the countries students are visiting; at the time, I listed hazards that occur in Italy, Ecuador, and Thailand. After discussing hazards, we discussed emergency numbers for the three countries and one participant mentioned that American phones with international plans cannot connect to the international emergency numbers and that students should obtain a local phone to be fully prepared. Finally, I discussed how having conversations with local staff and host families is vital to truly being prepared and that only through conversations in-country can a student have all the information they need to be prepared for hazards. After these tips were presented, we discussed preparedness kits, issues to avoid with preparedness kits (missing batteries, canned food without a can opener, etc.), and new gadgets that are being developed that work well in survival kits. This section of the workshop was used to give resources to students so they understood ways to prepare, specific hazards to
prepare for in the countries they were traveling to, and to share information among the workshop community on other ways of preparing.

The final section of the workshop went over what to do after a disaster occurs. This section outlined that there are resources, both government and nonprofits, that are available to provide assistance in the case of a disaster. This section also reviewed the best way to provide assistance in case a disaster did occur, suggestions to avoid being a spontaneous volunteer, researching organizations to donate to, and to remember disaster needs are long-term. If a student is fully prepared, then ideally the hazard will not turn into a disaster, but this section addresses that disaster do occur, there are resources to help individuals, and if a student is not affected by the disaster there are still ways they can be active in disaster response, because response and preparedness together are the beginning and end of the disaster cycle.

The goal of presenting a workshop like this as part of the study abroad student disaster preparedness plan is to reduce problems with individual preparedness and to begin encouraging students to be active participants in the preparedness process. The workshop is designed not as a lecture, but as a collaborative conversation, with interactive activities, so that the student begins to feel ownership in the preparedness process and will truly believe in the idea that “preparedness is everyone’s responsibility.”

I recommend that study abroad organizations make a workshop like this mandatory for the students and that it be presented at least one month in advance of students’ departure date. This will work to have students begin the preparedness process, but will also give them time to do more research and to fully absorb the information.
Step 3: Personal Emergency Action Plans

In order to create a comprehensive disaster plan for study abroad students, Step 3 involves requiring students to create their own Emergency Action Plan. To prepare for disasters, businesses are responsible for creating business continuity plans, universities and study abroad organizations are responsible for creating emergency operations plans, and students should be responsible for creating individual emergency action plans. Either as an activity added to the workshop or as a separate at home activity, students should be required to fill out their own emergency action plans. By filling out individual emergency action plans, students will research and identify hazards that they may encounter, identify important emergency contact information, and discuss communication protocols and evacuation procedures. This process can be done in person or can be assigned as an online activity that students must complete before going abroad. Having students fill out individual emergency action plans can also be used as an activity to initiate communications with the host offices abroad (students can send emails with questions on important phone numbers, evacuation procedures, etc.). There are parts of the emergency action plan that students may not have the resources to complete, but by working with the study abroad organization and host sites, they can begin thinking of their own personal needs in a disaster. The literature suggested that the best way to create a prepared community is by having prepared individuals (Reich, 2006), and requiring students to fill out emergency action plans ensures that the students have thought about preparedness and have their own plan.

In order to have students fill out their own emergency action plan, the organization should provide a template of questions they want the student to consider and answer. Studentsabroad.com provides emergency action plan steps as well as questions to consider in emergency action plans (Center for Global Education, 2012). The SAFETI Adaptation of Peace
Corps Resources (2014) also has a description of what should be included in emergency action plans. This resource recommends that all emergency action plans should include “a) Types of Emergencies Covered b) Roles and Responsibilities c) Communication d) Travel and Transportation e) Safety and Health Concerns f) Administration g) Contingencies,” but for the purpose of a student emergency operation plan, administration and contingency concerns are not as important. Using these two resources, I have developed an emergency action plan worksheet for students, which covers the first five topics mentioned by SAFETI (2014), and can be found in Appendix C. Ultimately, the study abroad organization and office must decide what they want the students to prepare for, but this worksheet provides a place to begin to help students identify hazards, important emergency contact information, evacuation procedures, and discuss communication protocols.

Filling out the emergency action plan should not be very time-consuming, but in combination with the disaster preparedness workshop, it requires students to begin thinking of how to actively prepare for hazards they may encounter. The students can fill out a paper copy or an electronic version e-mailed to them, or the plan could be posted on a website. Students should keep a copy for themselves, but should also turn in a copy to their study abroad office, which gives the university access to the students’ plan if a hazard does occur. The document should be filed with other important confidential information to protect the student. Requiring students to fill out an emergency action plan encourages individuals in the community to become prepared and provides the student with the resources to be truly prepared. I believe this is a key piece to producing an actively engaged, prepared study abroad student.

**Step 4: Pocket Hazard Guide**
The final step toward creating a comprehensive disaster preparedness plan for the study abroad student involves sending a pocket guide of emergency procedures with the student on their travels. Similar to the flipbooks created by the University of Oregon, sending a basic procedures guide with students listing what to do during hazards helps them to prepare in advance as well as not panic in the moment, which could turn a hazard into a disaster. Armed with resources on preparing, a workshop that encourages students to think more about preparation, and going through the process of creating an individual emergency action plan; having a small emergency procedures guide on hand, is the last step in developing a fully hazardous prepared study abroad student.

The emergency guide I created can be found in Appendix D. The guide has two parts. The first page provides a space to fill in important contacts such as the host university, embassy contact information, and fire, medical, and police numbers. It also includes a section for the student to fill in passport information, personal medical issues (such as allergies and blood type), and insurance information. This information could be a valuable resource in a medical emergency. The second part of the emergency guide includes a compilation of emergency procedures and instructions for handling eight types of hazards as identified by the American Red Cross (Types of Emergencies, n.d.). The study abroad office can choose to send the student with the guide including all eight hazards, or tailor the guide to hazards and risks identified for specific countries. Also, the current eight hazards listed are all natural hazards, if the study abroad office has specific procedure for actions a student should take during political unrest or conflict these could be added to the guide. The template is a starting place, but is meant to be a fluid guide that can be adapted to specific countries and hazards. The final piece of the hazard guide is a go-bag checklist, taken from the list provided by the University of California, Berkeley.
DISASTER PREPAREDNESS PLAN FOR STUDY ABROAD STUDENTS

(Berkeley Office of Emergency Management, 2014, Planning and Preparedness). The list provides students with a quick reference of what should be in their emergency kit. The hazard guide serves the purpose of a quick reference guide that students can keep with them at all times during their study abroad. It is the final resource towards creating a study abroad student who is prepared for any potential hazards.

Discussion

Expected Outcomes

This four-step study abroad disaster preparedness plan is created with the goal of producing a study abroad student with a heightened level of perceived risk, knowledge of potential hazards, and the resources to be actively engaged in personal disaster preparedness and response. Each step of this proposed intervention works toward decreasing the problems of individual preparedness, but especially toward the problem of public complacency. It is expected that students, who are given the resources in steps one and four and are required to participate in the activities in steps two and three, will, at a minimum, feel adequately prepared for encountering hazards while abroad. As a result of having prepared students, it is expected that small hazards will not become disasters for these students. The maximum outcome of this proposed intervention would be not only having prepared students, but students that feel actively involved in individual preparedness and will continue to prepare themselves for future hazards they may face, both abroad and at home. This intervention works toward producing prepared individuals, but as prepared individuals create prepared communities, it is also possible that this intervention could result in a prepared community. Disaster education for youth has shown to be
extremely valuable for communities, and it is expected that by creating prepared study abroad students there will be an effect on the community at the university level (abroad and at home), the host community, and the at-large community of mobile individuals. This disaster preparedness plan is one very small step toward creating a prepared global society.

**Limitations**

It is important to note with this proposed intervention there are several limitations. The biggest limitation is time. Due to the short time frame in which this proposed intervention was developed, there wasn’t enough time to test several steps of the intervention or fully develop them. I was able to present the pilot workshop, but was unable to evaluate its success. The emergency action plan and hazard guide were also untested, and therefore not evaluated for effectiveness due to time constraints. A limited time frame placed big constraints on this project.

The second limitation is in regard to the case studies. Because the case studies were based on website analysis (information that could be found on university websites), it is possible that information is missing on each university’s disaster preparedness activities and preparedness for study abroad students. It is possible that offices are including information in person that is not listed on the websites, which made it impossible for me to know the full scope of each university’s preparedness planning. At the beginning of the research process I reached out to several of these universities’ and their study abroad offices, but was unable to get in contact with officials. As a result, I was unable to directly see their disaster preparedness plans. In future case studies, I would like to dig deeper and interview personnel in the emergency management and study abroad offices to learn more about how activities are developed and presented to students, as well as to discuss how these offices are working toward including students in disaster preparedness. Although there may be missing information from the case studies, I believe the
website analysis still provided a valuable snapshot of what universities are doing to address student preparedness.

Unfortunately, a disaster preparedness plan can never be truly evaluated for effectiveness until the individual actually encounters a hazard. It takes time and specific circumstances to fully evaluate if the plan is working. However, I believe the plan can still be very beneficial and provide needed support, so that when there is a chance for it to be tested, the results will not be disastrous.

**Future Recommendations**

My disaster preparedness plan for the study abroad student is just the first step in working toward creating fully prepared study abroad communities and truly disaster resistant universities. The first recommendation would be for a study abroad office to implement the proposed intervention. By implementing all four steps, it will be possible to evaluate the effectiveness of this plan. If it is shown to be very effective, it is possible that the plan could then be adapted and used for even more study abroad organizations or offices.

The second recommendation is to recognize that preparedness does involve the entire community. This plan works towards creating fully prepared students, but it is still just as imperative to have prepared study abroad offices and organizations, as well as prepared host universities and families. Interactive preparedness plans, such as the one I propose, should be developed for all actors in the study abroad community. Once all parties have a preparedness plan, a great next step would be to perform a full disaster scenario including the home university study abroad office, the host university, the host families, and the students. This is one of the best ways to test if the preparedness plans are working, before the occurrence of an actual hazard.
Third, I recommend that it be noted that disaster preparedness is a fluid and constant process. Once any organization begins the four-step process, it is important to remember that information is always changing and updating. This plan is just the beginning; it should be tailored to each situation and should always be reviewed and updated to ensure that it provides the best preparedness information. I recommend that the plan be evaluated and updated annually, at the least. In addition to evaluating and updating the plan, new parts could be added in the future; go-bag kits could be sold or distributed to students like those sold at the University of Oregon, or a disaster preparedness smartphone app could be created for students like the one developed for the University of California, Berkeley. New information and technologies for disaster preparedness are continually being developed, and any organization adapting the four-step plan should take this into consideration and continue research on how to provide the best disaster preparedness resources possible.

**Conclusion**

Research has shown that disasters are increasing exponentially and will continue to do so in the future (Chafe, 2007; Nakagawa & Shaw, 2004; Ginter et al., 2006). Due to the rising number of disasters and their ever-growing cost, there has been an increased emphasis on the need to create disaster-resistant communities across the globe. The literature recognizes that disaster preparedness within individuals and communities is an important step in creating disaster resistant communities (Cutter et al. 2013). However, the literature also shows that the public is often complacent in the need to prepare (Paton, 2006). Individuals do not prepare for hazards because they feel uninformed, perceive the risk as not real, or believe that it is not their responsibility to prepare (Tierney et al., 2001; Paton et al, 2005; Harries, 2008). Several researchers propose that there are tactics that can increase preparedness in individuals, which
include increasing community engagement in disaster preparedness, focusing more on disaster preparedness education, and better planning strategies (Rod et al., 2012; Miller et al., 2013; Kapucu, 2008; UNESCO, 2010; Ablah et al., 2009). The literature also points out that disasters have become an issue for universities in increasing years (FEMA, 2003). In this literature, there are many suggestions of improving disaster preparedness on university campuses and including students in this preparation, but there is a large gap in the literature on how to plan and improve disaster preparedness for study abroad students. This culminating project begins to fill in that gap of preparedness for study abroad students.

Through a case study analysis of university disaster preparedness plans and actions, I was able to examine continued lapses in preparedness for study abroad students. The case studies provided information on the existing platforms available to reach students and encourage hazard preparedness. From the information provided in previous studies and the case study analysis, I created a proposed intervention to fill the need for study abroad students. I developed a four-step study abroad student disaster preparedness plan that targets stopping problems with individual preparedness and producing a study abroad student that is fully prepared for hazards he/she might encounter. The four-step plan involves website resources, a preparedness workshop, individual emergency action plans, and a pocket hazard guide. These four steps work to increase perceived risk, provide students with the knowledge of how to prepare, encourage students to accept responsibility of preparedness, and ultimately to result in a study abroad student actively engaged in hazard preparedness.

This culminating project provides a valuable way to incorporate study abroad students in disaster preparedness, but is not the final step in working toward fully prepared study abroad programs, universities, or global communities. I suggest that future research be conducted to
examine how plans such as this one can be incorporated into other communities to create prepared individuals, and how does creating prepared students translate into having more prepared communities in the future, and what other activities can be used to encourage individuals to become actively engaged in their own preparation? There is a vast amount of research that needs to be conducted on disaster preparedness and resilience; this culminating project is a starting point to filling the need concerning preparing study abroad students and, in general, creating a more disaster resilient community worldwide.

References


University of California Berkeley (2014). *Emergency operations plan.*

University of California Berkeley (2014). *Multi-year training and exercise plan.*


University of Central Oklahoma (2012). *Campus-community emergency response team.*


Appendix A

University of California, Berkeley Go-bag Checklist

EMERGENCY GO BAG Checklist

☐ Water

☐ Food (snack bars, sports bars, trail mix, canned food + can opener)

☐ Flashlight

☐ Jacket/Hoodie

☐ Sturdy shoes

☐ AM/FM Radio

☐ Duct/Duck Tape

☐ First Aid Kit

☐ Prescription Medication (ask your health insurance company about getting extra “disaster meds”)

☐ Contact List (because your cell phone battery won’t last forever)

☐ Anything else you think you’ll need or want!
Appendix B

Disaster Preparedness Workshop

Slide 1

Disaster Preparation Workshop

By: Kimberly Ligon
IPSL/Concordia University

Slide 2

Intro/ Why are you here?

• i) Name
• ii) Why are you interested in workshop? What do you hope to get out of it?
• iii) What experience have you had with disasters

Intro/ Why are you here?
Slide 3

Intro/ Who am I?

• Student in M.A.I.D.S program - IPSL/Concordia University
• My disaster experience
  • Lived through 2 hurricanes,
  • Americorps NCCC experience,
  • Internship with Oregon Volunteers,
  • Tsunami warning on Galapagos
• High interest in disaster preparedness/relief - (thesis research)
Goal of this workshop

- The Goal of this workshop is to give some tips and ideas about how to prepare as individuals for disasters, but more importantly to start the conversation around disaster preparedness. Participants in this workshop may have tips or ideas that I don't know about and vice versa. The goal of this workshop is to bring awareness of disaster preparedness needs and to begin collaboration.

What is a Disaster?

- Professional definitions in scholarly literature:
  - No one recognized definition
  - No universally acknowledged definition of disaster
  - Tierney, 2007: “disaster scholars now argue that, far from being nonroutine, disasters should be understood as normal, common occurrences that reflect the characteristics of the societies in which they occur” and that “at the most basic level, the causes of disasters are socially constructed”
What is a Disaster?

- Conceptual definition that I have used in my past research
- Disasters are man-made or natural incidences that cause unrest within society and overwhelm the resources (food, water, housing, and electricity) directly available to that society
Why prepare for Disasters? Is it a necessity? What are the chance I will be affected?

Information from IFRC

World Disasters Report

- Good source of information

Disaster data

According to the Centre for Research on the Epidemiology of Disasters (CRED), 361 disasters related to natural hazards and 65 related to technological hazards (e.g., volcano eruptions or nuclear accidents) were reported worldwide. The number of natural disasters was the lowest in the 2010s. While the number of technological disasters, most notably the nuclear accident in Japan, was the highest in the 2010s.

The number of deaths caused by natural disasters (15,455) is almost 50% lower than the average for the decade (25,701), much lower than the peak year of 2004 (23,062 deaths, 12,031 deaths and 2005 (13,725 deaths).
Slide 15

In 2011, natural disasters cost $306 billion, the fifth highest of the decade. The hurricane Sandy cost $65 billion, a strong affecting the New York City area and about half of the total was over $20 billion. Two hurricanes struck South Carolina in the summer of 2018, with total costs of $2 billion. These 12 hurricanes cost $131 billion in total, with 60% of the cost being attributed to damage ranging between $100 billion and $400 billion for a total of $253 billion. The cost per life was $44 million.

Slide 16

<table>
<thead>
<tr>
<th>Table 1: Total cost of disasters, by country, level of human development, and year (2004-2013) in millions</th>
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Note: The data is based on estimates and may not be accurate.

Slide 17

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<th>Table 2: Number of people affected by natural disasters, by country, level of human development, and year (2004-2013) in thousands</th>
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Slide 18

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<th>Active disasters in US</th>
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Slide 20

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<tr>
<th>Bathroom Break!</th>
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Slide 21

Are you prepared?

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Slide 22

A Tsunami Warning has been issued. What is your first reaction?

• A. Go to the school to gather with fellow students and teachers (Pink Card 2)
• B. Go home to your host family (Yellow Card 2)
• C. Go to the beach and watch the waves come in and post photos on Facebook (Green Card 1)

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Slide 23

Did you reach the shelter?
DISASTER PREPAREDNESS PLAN FOR STUDY ABROAD STUDENTS

Slide 24

Discussion around Game

• What did you learn from this exercise?
• How did it make you feel?
• What went wrong?
  • Who’s responsible in a disaster? You? The School? The Your Host family? The government?
• If this scenario was real life, what would you do to make it better?

Slide 25

Tips on how to prepare

• Overall advice/ for disasters anywhere:
  • Have a plan (but also be aware plans may change)
  • Good plans should include:
  • Awareness of disaster risks, communication plan (talking is better than phone calls), meeting spot (first, evacuation routes, medical information
  • Think about plans in multiple locations, think about building structures
  • Be aware of local city/government plans, if they exist.
  • Know where to find reliable information
  • For information on preparing: ready.gov, FEMA.gov, local news/radio, new disaster apps being created
  • Have a preparedness kit
  • Back up important technological information: hard drive/cloud, etc.

Slide 26

Tips for preparing while abroad

• Register with Department of State’s-STEP program
• Pay attention to safety and security
• May get instructions for evacuation
• Remember: do not rely on to give immediate information or to physically evacuate
• Evacuation is a last resort. You will be charged for the evacuation
• Do your research before you go; what natural disasters occur in this area, are you going during a disaster season (cyclones, etc.)

- Department of State; Country info/research with other sites
- Italy: Volcanoes, Earthquakes, Flooding, politically motivated violence/demonstrations
- United Kingdom: Political unrest (Northern Ireland), terrorism concerns, Floods
- Philippines: Current Travel Warning (terrorism), typhoons, earthquakes
- ...
Slide 27

**Tips for preparing while abroad**

- Have a way to communicate both inside the country and abroad
- Emergency numbers:
  - Italy: Ambulance 112, Fire 118, Police 113
  - United Kingdom: 999
  - Philippines: 166, 117
- Cell phones from US won’t call emergency numbers
- Know disaster plans of university (if exist) of the country you’re in
- Know how to say HELP in host country language
- Have conversations once in country
  - Talk with school
  - Talk with host family
- Have diásmosis occurred? Are there designated shelters? What do warning systems sound like? (Some countries have volunteers that go house to house to signal warning).

Slide 28

**Wait! What should be in my preparedness kit?**

Slide 29

**Ideal Preparedness Kit**

- **BASIC DISASTER SUPPLIES KIT**
  - Water, one gallon of water per person per day for at least three days for drinking and sanitation*
  - Food, at least a three-day supply of non-perishable food*
   - Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both*
   - Flashlight and extra batteries*
   - First aid kit*
   - Whistle to signal for help
   - Dust mask to help filter contaminated air and plastic sheeting and duct tape to shelter in place
   - Moist towelettes, garbage bags and plastic ties for personal sanitation*
   - Wrench or pliers to turn off utilities
   - Manual can opener for food
   - Local maps
   - Cell phone with chargers, inverter or solar charger*
   - Multi-purpose tool*
   - Copies of personal documents (medication list and pertinent medical information, proof of address, deed/lease to home, passports, birth certificates, insurance policies)*
   - Extra cash*
   - Emergency blanket

*Ready.gov and American Red Cross*
You've prepared but a disaster still hit: Now what?

• Disasters occur and no matter what happens and how much we prepare, things still go wrong

• After disasters occur, resources
  • If you need help:
  • FEMA, SBA loans, Insurance,
  • Red Cross & Red Crescent Societies
  • Other organizations active in disasters: Mercy Corps, Local VOAD groups, Lutheran World Services, Episcopal Relief and Development, and more!

You were lucky, but want to help others:

• If you are not already there, it is best not to just show up at the disaster site: issue of the spontaneous volunteer

• Often best form of immediate assistance is monetary, organizations have trained individuals to respond: donations help these organizations operate on the ground

• Do your research: there are more organizations active in disasters than just Red Cross, donate responsibly.

• If you cannot afford monetary donations, but really want to be of use
  • Volunteer Reception Centers and hotlines
  • Again do your research, many local volunteer organizations need help at distribution centers—clothing and food and at local P.O.D.S—Points of Distribution

Don't forget about the disaster zones

• Recovery from disasters is often a Long-term effort (Long-term recovery committees)

• Relief is still going in Haiti, New Orleans, Philippines etc.

• You can still be of assistance years after the disaster
Questions, Comments, Concerns?

THANK YOU!!
Appendix C

Individual Emergency Action Plan

Individual Emergency Action plan (compiled from studentsabroad.com and SAFTI resources)

Name __________________ Address __________________________________________

Phone Number________________ E-mail_____________________________________

Emergency Contact 1:

Name __________________ Address __________________________________________

Phone Number________________ E-mail_____________________________________

Relationship to Student___________________________________________

Emergency Contact 2:

Name __________________ Address __________________________________________

Phone Number________________ E-mail_____________________________________

Relationship to Student___________________________________________

What country will you be studying/ living in? _______________________

I. Identify risks and Hazards

A. What Hazards are known to affect this country? (Include natural hazards, political/ civil unrest or conflict, and medical issues)

______________________________________________________________

B. I have reviewed basic emergency procedures for these hazards (Resources: ready.gov, cdc.gov, http://www.redcross.org/prepare/disaster)

Yes _____

No ____
C. I have reviewed needed vaccines and have obtained or plan to obtain them.

Yes ______

No ______

II. Roles and Responsibilities

A. What are my responsibilities in a disaster? (Check all that apply)

Prepare in advance____

Shelter in place ____

Evacuate to Safety____

Communicate with my host family ____

Communicate with host site once I have reached safety____

B. Discuss with host site/ university emergency procedures. What are the responsibilities of staff? __________________________

Host families? __________________________

III. Communications

A. What are the important phone numbers at the host site/university?

_________________   _____________     ________________    ________________

B. Other country specific emergency numbers:

<table>
<thead>
<tr>
<th>City or country's 911 equivalent</th>
<th>Local Government/Visa office:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consulate/Embassy:</td>
<td>Police:</td>
</tr>
<tr>
<td>Fire:</td>
<td>Hospital:</td>
</tr>
<tr>
<td>Post Office:</td>
<td>Translator Service:</td>
</tr>
<tr>
<td>Lawyer:</td>
<td>Red Cross:</td>
</tr>
</tbody>
</table>
24–Hour Assist/Insurance Hotline: __________________________
Other: __________________________

C. Study Abroad Office numbers __________________________

D. What is the communication protocol for your home university study abroad office and the host site/university? Who should I contact first____________
second____________ third____________?

IV. Travel/Transportation/ Evacuation

A. Discuss evacuation procedure with host site/university.

B. What are the evacuation procedures? __________________________

C. Is there a pre-planned meeting site? Yes No
   If yes, where__________________________
   If no, ask host site/university for suggestions of safe meeting places

__________________________

Be aware of all your emergency transportation options. Know the numbers for the following:

Airport: ______________ Bus Station: ______________
Train Station: ______________ Metro Station: ______________
Rent–a–Car: ______________ Boat/Ferry/Port Authority: ______________
V. Safety and Health Concerns

A. Are there any other special conditions to consider which are unique to your situation (i.e., a personal physical handicap, medical concerns, poor public transportation or phone service in your area)?

B. Is the university host/site aware of this?

C. Do I have all the medications I need to survive in case of emergency?

VI. Emergency Kit, Emergency Funds, and Extra Documents

A. Do you have an emergency kit or go-bag prepared?

B. Which items do you still need to add to kit before it is fully stocked and ready?

C. Do you have emergency cash reserves or emergency credit cards on-hand, in case you can’t count on banks/ATMs or get to a bank/ATM?

D. “Using the emergency supplies and reserve money you have set aside, for how many days would you be able to sustain yourself, and what would you use each day?” (Studentsabroad.com)

E. Do you have copies of the following documents? Attach one copy to your emergency action plan, Give another copy to your emergency contact

1. Copy of Passport and Visa (where applicable)
2. Copy of Emergency Assistance Hotline Information
3. Copy of Insurance Card/Information
4. Copy of Area Maps/Safe Routes
5. Special Medical Needs Treatment Information
6. Copy of Home & International Drivers Licenses
7. All other Important Documentation
Appendix D

Pocket Hazard Guide
### Important Phone Numbers

<table>
<thead>
<tr>
<th>Name &amp; Position</th>
<th>Contact Numbers</th>
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### Embassy

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<tr>
<th>Address:</th>
<th>Phone Number:</th>
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### Emergency Numbers

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<tbody>
<tr>
<td>Medical</td>
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<td>Fire</td>
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<td>Police</td>
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### Medical and Insurance Information

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<th>Name as on Passport</th>
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<th>Allergies/ Medical Conditions</th>
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<th>CISI Number</th>
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### Additional Contact Info

<table>
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Emergency Procedures Reference
(American Red Cross, n/d, Types of Emergencies)

*EARTHQUAKE*
If you are inside when the shaking starts...
*Drop, cover and hold on. Move as little as possible.*
*If you are in bed, stay there, curl up and hold on. Protect your head with a pillow.*
*Stay away from windows to avoid being injured by shattered glass.*
*Stay indoors until the shaking stops and you are sure it is safe to exit. When it is, use stairs rather than the elevator in case there are aftershocks, power outages or other damage.*
*Be aware that fire alarms and sprinkler systems frequently go off in buildings during an earthquake, even if there is no fire.*

If you are outside:
* Find a clear spot (away from buildings, power lines, trees, streetlights) and drop to the ground. Stay there until the shaking stops.*
*If a power line falls on your vehicle, do not get out. Wait for assistance.*
*If you are in a mountainous area or near unstable slopes or cliffs, be alert for falling rocks and other debris. Landslides are often triggered.*

*FIRE*
*GET OUT, STAY OUT, and call your local emergency number*  
*If closed doors or handles are warm, use your second way out. Never open doors that are warm to the touch.*
*Crawl low under smoke.*
*Go to your outside meeting place and then call for help.*
*If smoke, heat or flames block your exit routes, stay in the room with doors closed. Place a wet towel under the door and call the fire department. Open a window and wave a brightly colored cloth or flashlight to signal for help.*

*FLOOD*
*Be prepared to evacuate at a moment’s notice.*  
*When a flood or flash flood warning is issued for your area, head for higher ground and stay there. Stay away from floodwaters. If you come upon a flowing stream where water is above your ankles, stop, turn around and go another way. Six inches of swiftly moving water can sweep you off of your feet.*

*TSUNAMI*
If you are in a coastal area and feel an earthquake that lasts 20 seconds or longer:
*Drop, cover and hold on. You should first protect yourself from the earthquake.*
*When the shaking stops, move quickly to higher ground away from the coast. A tsunami may be coming within minutes.*
*Avoid downed power lines and stay away from buildings and bridges from which heavy objects might fall during an aftershock.*

What to Do During a Tsunami Warning:
*If you hear an official tsunami warning or detect signs of a tsunami, evacuate at once.*
*Take your emergency preparedness kit. Having supplies will make you more comfortable during the evacuation.*
*Get to higher ground as far inland as possible. Watching a tsunami could put you in grave danger. If you can see the wave, you are too close to escape it.*

*TORNADO*
*The safest place to be is an underground shelter, basement or safe room.*
*If no underground shelter or safe room is available, a small, windowless interior room or hallway on the lowest level of a sturdy building is the safest alternative.*
*If you are caught outdoors, seek shelter in a basement, shelter or sturdy building*
**HEAT WAVE**

*Stay hydrated by drinking plenty of fluids even if you do not feel thirsty. Avoid drinks with caffeine or alcohol.*
*Eat small meals and eat more often.*
*Avoid extreme temperature changes.*
*Wear loose-fitting, lightweight, light-colored clothing. Avoid dark colors because they absorb the sun’s rays.*
*Slow down, stay indoors and avoid strenuous exercise during the hottest part of the day.*
*Postpone outdoor games and activities.*
*Use a buddy system when working in excessive heat.*
*Take frequent breaks if you must work outdoors.*

**VOLCANO**

*Follow the evacuation order issued by authorities.*
*Avoid areas downwind and river valleys downstream of the volcano.*

Protect yourself during ashfall:

*Wear long-sleeved shirts and long pants.*
*Use goggles to protect your eyes.*
*Use a dust mask or hold a damp cloth over your face to help breathing.*

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**THUNDERSTORM**

*Postpone outdoor activities if thunderstorms are likely to occur. Many people struck by lightning are not in the area where rain is occurring.*
*If a severe thunderstorm warning is issued, take shelter in a substantial building or in a vehicle with the windows closed.*
*If you can hear thunder, you are close enough to be in danger from lightning. If thunder roars, go indoors!*
*Avoid electrical equipment and telephones.*
*Shutter windows and close outside doors securely. Keep away from windows.*
*Do not take a bath, shower or use plumbing.*
*If you are outside and cannot reach a safe building, avoid high ground; water; tall, isolated trees; and metal objects such as fences or bleachers. Picnic shelters, dugouts and sheds are NOT safe.*

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**Do you have a preparedness kit?**

**Go– Bag Checklist (University of Berkeley)**

*Non-perishable food (dried food, energy bars, etc.); bottles of water*
*Flashlight with batteries; battery-operated or crank radio*
*Alternate power source to charge your cell phone (emergency phone bank, portable charger)*
*Duct tape*
*Maps (campus, City of Berkeley)*
*First aid kit and extra medications*
*Photo ID (copy of driver’s license, passport, Cal1 Card)*
*Copy of important records (birth certificate, lease, etc.)*
*Clothes and sturdy shoes*
*Personal items and toiletries (eyeglasses, toothbrush, etc.)*
*Cash in small bills (ATMs may not work after a disaster)*
*List of emergency phone numbers*

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**Be Prepared While You Travel the World!!**