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# How Do College Homeland Security Curricula Prepare Students for Homeland Security?

## Abstract

This dissertation analyzed the policies of colleges in the United States as they relate to homeland security curricula. The quantitative study surveyed college homeland security faculty to measure how colleges developed, categorized, and ensured that their homeland security curricula remained current as homeland security needs changed. The findings of this research will help colleges develop common and core homeland security curricula that prepare students for homeland security. The analysis of the survey responses determined that homeland security is an evolving academic discipline. College homeland security curricula were housed in various academic departments, were taught by faculty from various academic disciplines, and bore various academic labels. The vast majority of the curricula were housed, taught, and bore programs names that resembled criminal justice, emergency management, and homeland security per se. Homeland security curricula were mostly multidisciplinary/interdisciplinary and contained multiple and varied topics that emphasized terrorism, critical thinking, collaboration, intelligence, strategy, all-hazards, critical infrastructure, emergency management, preparedness, risk management, cyber security, and law. The results of this study suggest that common and core homeland security curricula can help prepare current and future members of the homeland security enterprise to provide a homeland that is safe, secure, and resilient.

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## First Supervisor

Richard Maurer

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How Do College Homeland Security Curricula Prepare Students for Homeland Security?

By

John G. Comiskey

Submitted in partial fulfillment  
of the requirement for the degree  
Ed.D. in Executive Leadership

Supervised by

Dr. Richard Maurer

Committee Member

Dr. Michael Muffs

Ralph C. Wilson, Jr. School of Education  
St. John Fisher College

August 2014

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2014

## **Dedication**

This dissertation is dedicated to the members of the homeland security enterprise that give their all to ensure a homeland that is safe, secure, and resilient.

To God, thank you for your sense of humor and for the countless blessings that I have received during my time on planet Earth.

To my wife Maureen, son John Joseph, and daughter Erin Marie, thank you for the many sacrifices you made, your encouragement, and your smiles.

To my Committee, Dr. Richard Maurer and Dr. Michael Muffs, thank you for your patience, advice, and sage counsel that made this dissertation journey possible.

To the members of my focus group, thank you for your commitment to the homeland security enterprise and the unfettered evaluation of the research survey.

To my colleagues at Monmouth University, Dr. Brian Lockwood and Prof. Timothy Tracey, thank you for your genuine interest and the statistical and survey assistance you provided.

*Fidelis ad Mortem*

### **Biographical Sketch**

John G. Comiskey is an Assistant Professor of Homeland Security at Monmouth University in East Long Branch, New Jersey. Mr. Comiskey is a retired New York City Police Lieutenant and a retired U.S. Coast Guard Reserve Senior Chief Petty Officer. He graduated from Queens College, CUNY with a Bachelor of Science in History in 1990 and a Master of Arts in Secondary Education, Social Studies in 2006. Mr. Comiskey also graduated from the Naval Post Graduate School in Monterey, California with a Master of Science in Homeland Security in 2010. He entered St. John Fisher College in the summer of 2012 and began doctoral studies in the Ed.D. Program in Executive Leadership. Mr. Comiskey pursued his research in the purposes of homeland security higher education curricula under the direction of Dr. Richard Maurer and Dr. Michael Muffs and received the Ed.D. degree in 2014.

## **Abstract**

This dissertation analyzed the policies of colleges in the United States as they relate to homeland security curricula. The quantitative study surveyed college homeland security faculty to measure how colleges developed, categorized, and ensured that their homeland security curricula remained current as homeland security needs changed. The findings of this research will help colleges develop common and core homeland security curricula that prepare students for homeland security. The analysis of the survey responses determined that homeland security is an evolving academic discipline. College homeland security curricula were housed in various academic departments, were taught by faculty from various academic disciplines, and bore various academic labels. The vast majority of the curricula were housed, taught, and bore programs names that resembled criminal justice, emergency management, and homeland security per se. Homeland security curricula were mostly multidisciplinary/interdisciplinary and contained multiple and varied topics that emphasized terrorism, critical thinking, collaboration, intelligence, strategy, all-hazards, critical infrastructure, emergency management, preparedness, risk management, cyber security, and law. The results of this study suggest that common and core homeland security curricula can help prepare current and future members of the homeland security enterprise to provide a homeland that is safe, secure, and resilient.

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## Chapter 1: Introduction

The terrorist attacks upon the United States of America on September 11, 2001 demonstrated that the nation was not prepared for twenty-first century threats (S, Rep. No. 107-351, H. Rep. No. 107-792, 2002; The National Commission on Terrorist Attacks Upon the United States, 2004). The question was raised: How should the nation prepare for future threats? The White House announced a “New National Calling: Homeland Security.” (White House, Executive Office of the President, 2001a, p.3) Commissions were launched, national strategies were issued, legislation was passed and enacted, and government agencies were established, transformed, and reorganized (Establishing the Office of Homeland Security and the Homeland Security Council, 2001; Homeland Security Act of 2002, P.L. 107-296; President’s Directive on National Preparedness, 2003; S, Rep. No. 107-351; H. Rep. No. 107-792, 2002; The National Commission on Terrorist Attacks Upon the United States, 2004; White House, 2001,2002a, 2002b).

In July 2002, the United States first ever National Strategy for Homeland Security defined homeland security as “a concerted national effort to prevent terrorist attacks within the United States, reduce America’s vulnerability to terrorism, and minimize the damage and recover from attacks that do occur.” (White House, 2002a, p.2) Since the events of September 11, 2001, intentional, natural, and accidental threats and risks to the nation persisted. The U.S. Intelligence Community and National Intelligence Council warned that terrorist, nuclear, and cyber threats to the nation were clear and present dangers (*Annual Threat Assessment*, 2006, 2007, 2008, 2009, 2010; *Global Intelligence Challenges*, 2005; National Intelligence Council, 2004, 2008, 2013; *Worldwide Threat*, 2002, 2003, 2004; *Worldwide Threat Assessment*, 2011, 2012, 2013, 2014). The Heritage

Foundation reported at least 61 terrorist plots against the U.S. since 9/11 (Lucaccioni, 2013; McNeill & Carafano, 2009; Zuckerman, Bucci, & Carafano, 2012). The White House, Congress, U.S. Department of Defense (DOD), U.S. Department of Education; U.S. Department of Homeland Security (DHS), U.S. Department of State, Government Accountability Office, National Governors Association, and National Climate Assessment and Development Advisory Committee recognized that many natural and accidental threats also posed significant risks to the nation (A Failure of Initiative 2006; Chertoff, 2009; Federal Emergency Management Agency, 2013; Government Accountability Office, 2013; Johnson, 2014; Melillo, Terese, & Yohe, 2014; National Governors Association, 2007, 2010, 2013; Ridge & Bloom, 2009; S. Rep. No. 109-322, 2006; *Threats to the Homeland*, 2013; U. S. Department of Defense, 2014; The President's Fiscal Year 2014 Budget Request, 2013; U.S. Department of Education, 2012; U.S. Department of Homeland Security, 2005, 2008a, 2008b, 2010a, 2010b, 2011a, 2011b, 2011c, 2012a, 2012b, 2013a, 2013d, 2014a, 2014b; U.S. Department of State, 2010; White House, 2002a, 2002b, 2006, 2007, 2010, 2011a, 2011b).

The U.S. government attempted to bind the evolving intentional, natural, and accidental threats of the twenty-first century into effective homeland security policies. The result was at least eight different U.S. government definitions of homeland security (Appendix A) that approached different threats with distinct policies. The U.S. government did not, however, have a consensus or common definition of homeland security. The national emphasis on homeland security illuminated the critical need and demand for quality educational programs that provided professionals with the fundamental knowledge and skills to meet the nation's homeland security requirements.

The nation's colleges and universities were called upon to prepare local, state, tribal, and federal leaders to help prevent future attacks and respond to those attacks that did occur (Charting a Course for Homeland Security Strategic Studies Conference, 2005; Center for Homeland Defense and Security, 2008, 2011 2012a, 2014a; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Rollins & Rowan, 2007). Hereafter, the term colleges will be used to describe both colleges and universities.

Leading the collegiate effort was the Center for Homeland Defense and Security (CHDS). CHDS was created by Congress, the Department of Justice (DOJ), and DOD in April 2002 to: educate and prepare a cadre of local, state, tribal, and federal leaders to collaborate across professional disciplines and levels of government to secure the homeland; define through evidence-based research the emerging discipline of homeland security; facilitate the development of a national homeland security education system by using an open source model to develop programs and *curricula*; and to share those resources with other academic institutions and agencies (Center for Homeland Defense and Security, 2011). Oliva and Gordon (2013) found that the word curriculum, and its plural curricula, in the world of professional education, had elusive, almost esoteric connotations. They cited Huebner's (1976) ascription of ambiguity and lack of precision to the term curriculum; Grumet's (1988) "field of utter confusion" curriculum label; and Kliebard's (1998) observation of the American curriculum as an assemblage of competing doctrines and practices. Oliva and Gordon (2013) found that curricula were built, planned, designed, constructed, improved, revised, and evaluated. They perceived curriculum:

as a plan or program for all the experiences that the learner encounters under the direction of the school. In practice, the curriculum consists of a number of plans, in written form and of varying scope that delineate the desired learning experiences. (Oliva & Gordon, 2013, p.7)

CHDS programs included a homeland security masters' degree program and a University and Agency Partnership Initiative (UAPI). The graduate curriculum was designed to prepare homeland security leaders to operate in an environment of extreme ambiguity with an emphasis on critical thinking around homeland security issues. UAPI was established to share CHDS curriculum and educational resources with academic institutions. Its activities included new member workshops, model curricula conferences, and educational conferences. UAPI's 1,200 plus partners represented over 330 colleges and agencies that shared their curricula and specialized expertise (Center for Homeland Defense and Security, 2014a, 2014b, 2014c, 2014d).

CHDS and its UAPI partners sought to prepare members of what would come to be known as the *homeland security enterprise* to prevent, mitigate, and respond to the intentional, natural, and accidental threats of the twenty-first century. The U. S. Department of Homeland Security (DHS) (2010a) defined the homeland security enterprise as “the collective efforts and shared responsibilities of Federal, State, local, tribal, territorial, nongovernmental, and private-sector partners—as well as individuals, families, and communities—to maintain critical homeland security capabilities” (pp. viii-ix). The term connoted a broad-based community with a common interest in the public safety and well-being of American society that was composed of multiple actors and stakeholders whose roles and responsibilities were distributed and shared. There was little



agreement, however, about what homeland security was, what academic disciplines were involved, what subjects should be taught, and the objectives of homeland security education (Bellavita, 2008; Bellavita & Gordon, 2006; Charting a Course for Homeland Security Strategic Studies Conference, 2005; Kelly, 2002; Morag, 2011; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Pelfrey & Kelley, 2013; Rollins & Rowan, 2007; Stelter, 2014; Tunnel, 2013).

### **Problem Statement**

Because the discipline of homeland security is still emerging and evolving and there is little consensus about what homeland security is, it is difficult to determine how college homeland security curricula should prepare students for homeland security.

### **Theoretical Rationale**

This study's theoretical rationale reflects Clovis' (2006) collaborative federalism theory of homeland security. Clovis argued that federalism and the activities associated with intergovernmental relations were fundamental to homeland security policy. The 2002 National Strategy for Homeland Security called for a common understanding of federalism by all parts of the government. Different levels of government, however, held different perspectives on federalism. All levels of government should aggregate, coordinate, and integrate their homeland security capabilities to ensure the greatest level of national preparedness.

Clovis (2006) noted that the Homeland Security Act of 2002 had brought together 22 separate organizations to form DHS. The agency was tasked to develop a national preparedness system. National preparedness, as outlined by Homeland Security Presidential Directive-8 was to be enhanced by a series of policies that would allow

federal, state, local, and tribal governments to collectively and comprehensively address catastrophic events, especially those that were the results of terrorism. *Preparedness* was “the existence of plans, procedures, policies, training, and equipment necessary at the Federal, State, and local level to maximize the ability to prevent, respond to, and recover from major events” (President’s Directive on National Preparedness, 2003, para 2).

Collaborative federalism recognized that homeland security, and particularly national preparedness were national issues requiring national solutions. The nation should aggregate, coordinate, and integrate their homeland security capabilities. Congress and its executive agent DHS, should provide leadership, facilitation, and appropriate funding. DHS should be an agent of subnational levels of government. States and local governments should collaborate with jurisdictions both vertically and horizontally. The nation might achieve the best possible level of homeland security preparedness through collaboration. Failure to collaborate would lead to inefficiencies and a nation unnecessarily at risk (Clovis, 2006).

### **Purpose of the Study**

The purpose of this study is to determine how college homeland security curricula prepare students for homeland security.

### **Research Questions**

Owing to an unresolved debate about the efficacy of undergraduate homeland security curricula (Bellavita, 2012; Collier, 2013; Morton, 2012; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Pelfrey & Kelley, 2013; Pelfrey, Kelley, & May, 2002), undergraduate and graduate homeland security curricula were analyzed separately.

The National Research Council, Committee on Educational Paradigms for Homeland Security (2005) argued that as an area of study, homeland security was too immature and too broad. A bachelor's degree in homeland security might give the false impression that some professional consensus about what actually constituted knowledge of homeland security existed and was not recommended. Instead, course work and recognition as undergraduate minors, concentrations, or certificates would be appropriate.

Pelfrey and Kelley (2013) concluded that the objectives and competencies for graduate homeland security education were known, could be taught, and would produce benefits in the preparedness of homeland security organizations. It would be "ludicrous" to replicate the same education at the undergraduate level. While, there seemed to be little vocational support for undergraduate education in homeland security, there might be stronger academic objectives such as critical thinking and critical writing in the courses developed for advanced undergraduates (p.6). DHS and other federal agencies should take a leadership role in a process similar to the *Bologna Process* that would involve identifying, with some particularity, the roles and objectives of undergraduate and graduate homeland security using homeland security as a proxy since it is at a germinal stage of development. The Bologna Process was a European higher education framework designed to define learning outcomes and ensure compatibility in the standards and quality of higher education qualifications (Benelux Bologna Secretariat, 2009).

Collier (2013) questioned the methodology used by Pelfrey and Kelley (2013). They provided only a partial view of homeland security education. Pelfrey and Kelley did not address recent efforts in homeland security curriculum development that were related to their fundamental questions. While the lack of a consistent definition of

homeland security (Reese, 2013) hampered efforts to create undergraduate and graduate homeland security curricula, the community of homeland security educators had made progress toward establishing curriculum standards. The Center for Homeland Defense and Security's (2009) model undergraduate homeland security curriculum, and the Homeland Security and Defense Consortium Association's (2009b, 2009c) drafts of specialized accreditation standards for graduate and undergraduate homeland security programs revealed a growing consensus of both the academic and professional communities. "It is probably time to recognize that the most recent approaches to undergraduate teaching and learning ensure graduates have the substantive knowledge and professional skills which were in the past mainly developed in graduate programs" (Collier, 2013, para 1).

Research questions one to three examined undergraduate homeland security curricula. Research questions three to six examined graduate homeland security curricula. The research questions are as follows:

1. How do colleges develop their undergraduate homeland security curricula?
2. How do colleges categorize their undergraduate homeland security curricula?
3. How do colleges ensure that their undergraduate homeland security curricula remain current as homeland security needs change?
4. How do colleges develop their graduate homeland security curricula?
5. How do colleges categorize their graduate homeland security curricula?
6. How do colleges ensure that their graduate homeland security curricula remain current as homeland security needs change?

### **Significance of the Study**

The national emphasis on homeland security led to the development of college homeland security curricula to prepare members of the homeland security enterprise to prevent, mitigate, and respond to the intentional, natural, and accidental threats of the twenty-first century. Government-sponsored educational programs including CHDS and over 290 public, private, and military colleges have since established over 400 homeland security programs. Twelve years after the nation's first national strategy for homeland security, however, there is little consensus about what homeland security is and how colleges should prepare students for homeland security. A current survey of college homeland security faculty helps identify common and core homeland security educational requirements that will help colleges develop curricula to prepare students for homeland security.

### **Definition of Terms**

*All-hazards* – incidents that range from accidents and natural disasters to actual or potential terrorist attacks (U.S. Department of Homeland Security, 2008b).

*Curriculum* – a plan or program for all the experiences that the learner encounters under the direction of the school. “In practice, the curriculum consists of a number of plans, in written form and of varying scope that delineate the desired learning experiences” (Oliva & Gordon, p.7).

*Curriculum workers* – curriculum planners, consultants, coordinators, and professors of curriculum that may approve, modify, mold, shape, and tailor curricula (Oliva & Gordon, 2013).

*Focusing events* – sudden, unpredictable, and harmful or potentially harmful events that gained the attention of policy makers and the public simultaneously and drove national policy more so than other policy areas (Birkland, 1997).

*Homeland security* – See Appendix A.

*Homeland security enterprise* – “The collective efforts and shared responsibilities of Federal, State, local, tribal, territorial, nongovernmental, and private-sector partners—as well as individuals, families, and communities—to maintain critical homeland security capabilities” (U.S. Department of Homeland Security, 2010a, pp. viii-ix).

*Meta-discipline* – a larger curricular focus that transcends traditional disciplinary boundaries to create a truly holistic, systemic, integrative worldview uncluttered by familiar limits and barriers (Werth, 2003).

*National preparedness* – policies that would allow federal, state, local, and tribal governments to collectively and comprehensively address catastrophic events, especially those that were the results of terrorism (President’s Directive on National Preparedness, 2003).

*Paradigm* – *universally* recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners (Kuhn, 1996, p. x).

*Preparedness* – The existence of plans, procedures, policies, training, and equipment necessary at the Federal, State, and local level to maximize the ability to prevent, respond to, and recover from major events (President’s Directive on National Preparedness, 2003)

*Strategic corporals* are entry-level and first-line supervisors that are trained to make critical decisions.

*Three block war* – a tactical engagement with strategic implications (Krulak, 1999).

*Tipping point* – a critical mass of circumstances that set us on a new and unstoppable course (Gladwell, 2000).

*Unidisciplinary* – a disciplinary approach in which members of a single discipline work together to address a common problem (Stokols, Hall, Taylor, & Moser, 2008).

*Whole of government approach to national security* – an approach to national security that balances and integrates U.S. defense, diplomacy, economic, and homeland security capabilities (White House, 2010).

*Wicked problems* – policy issues that cannot be described definitively and do not have any ultimate or objective answers (Rittel and Weber, 1973).

## **Chapter Summary**

Chapter 1 identified a new national calling, homeland security. Homeland security was “a concerted national effort to prevent terrorist attacks within the United States, reduce America’s vulnerability to terrorism, and minimize the damage and recover from attacks that do occur” (White House, 2002a, p.2). The national calling illuminated the critical need for educational programs that provided members of the homeland security enterprise with the knowledge and skills to meet the nation’s homeland security requirements. CHDS and its 1,200 plus UAPI partners sought to prepare members of the homeland security enterprise to prevent/mitigate, prepare for, respond to, and recover from twenty-first century threats. There was little agreement, however, about what homeland security was and how colleges should prepare students for homeland security. The purpose of this study was to determine how college homeland security curricula prepare students for homeland security. The study helps to

identify common and core homeland security educational requirements that assist colleges in preparing students for homeland security.



## Chapter 2: Review of the Literature

### Introduction and Purpose

Bellavita (2005, 2006) argued that homeland security was produced by events that initiated and sustained multiple issue-attention cycles and that homeland security was a *wicked problem*. Wicked problems were policy issues that could not be described definitively and did not have any ultimate or objective answers (Rittel & Weber, 1973). Moreover, Birkland (1997) referred to issue-attention cycle events as *focusing events*. The events were sudden, unpredictable, and harmful or potentially harmful. They gained the attention of policy makers and the public simultaneously and drove national policy more so than other policy areas. Bellavita (2006) argued that most of the significant problems in homeland security were too undefined, too broad, too complex, and too wicked to allow an ordered and intentional journey into the future. He was joined by Horn and Weber (2007), Joyce (2007), Nairn (2009), Kettl (2009), Treverton (2008), Allen (2012), Falkow (2013), the Center for Homeland Defense and Security's Future Advisory Committee, (2013) and Kahan (2014), all of which also found that homeland security was a wicked problem.

Bellavita (2012) proposed several arguments that might allow an ordered and intentional journey into the future of homeland security. One argument maintained that the homeland security enterprise should have paid attention to the problems they cared about and to where they were in the issue-attention cycle. Homeland security scholars had an obligation to the emerging profession to demonstrate that they had a theoretical

foundation for what they taught and that their lessons had practical consequences in the real world. Scholars should operationalize terms like theory and homeland security and announce what they mean by those terms. They should develop and test theories for that foundation. Scholars must, however, realize that there are alternative meanings for many of the core terms and select meaning from what most informed and knowledgeable people would say are reasonable understandings of those words.

### **Review of the Literature**

The review of the literature examines how multiple issue-attention cycles fostered different homeland security policies and how people in homeland security perceived homeland security. The review continues with an examination of how colleges interpreted the nation's evolving homeland security policies and how they developed curricula to prepare students for homeland security.

**A new national calling.** The terrorist attacks of September 11, 2001 demonstrated that the U.S. was not prepared for twenty-first century threats. The question was raised: How should the nation prepare for future threats? Commissions were launched, national strategies were issued, legislation was passed and enacted, and government agencies were established, transformed, and reorganized (Establishing the Office of Homeland Security and the Homeland Security Council, 2001; Homeland Security Act, 2002; President's Directive on National Preparedness, 2003; Senate, Report. No. 107-351 and House of Representatives Report. No. 107-792, 2002; The National Commission on Terrorist Attacks Upon the United States, 2004; White House, 2001, 2002a, 2002b).

The Homeland Security Act of 2002 (P.L. 107-296) established DHS through the integration of 22 different federal departments and agencies. DHS' primary mission was to prevent terrorism within the U.S., reduce America's vulnerability to terrorism, and minimize the damage and assist in the recovery of attacks that did occur. The White House's (2002a) National Homeland Security Strategy addressed the threat of terrorism to the U.S. The intent was to "mobilize and organize the Nation to secure the U.S. homeland from terrorist attacks." Acknowledging that American democracy was rooted in the precepts of federalism, the challenge was to develop interconnected and complementary systems. The national strategy required a national effort. *Homeland security* was "a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur." (White House, 2002a, p.2)

**All-hazards approach to homeland security.** The events of Hurricane Katrina in the summer of 2005 demonstrated that the nation was again not prepared for twenty-first century threats. As was the case of the September 11, 2001 terrorist attacks, the question was raised; how should the nation prepare for future threats? Congressional committees were empaneled, strategies were issued, legislation was passed and enacted, and agencies were restructured to prepare the nation for future threats including natural disasters (A Failure of Initiative, 2006; Chertoff, 2008; Post-Katrina Emergency Reform Act of 2006, P.L. 109-295; S. Rep. No. 109-322, 2006; U.S. Department of Homeland Security, 2008a; White House, Executive Office of the President, 2006, 2007).

The White House's (2007) National Strategy for Homeland Security maintained that the nation's understanding of homeland security must adapt to new realities and

threats. Hurricane Katrina was a reminder that threats came not only from terrorism, but also from nature. The nation must improve its all-hazards response and recovery capabilities. The U.S. Department of Homeland Security (2008a) applied an all-hazards approach to homeland security predicated on a culture of preparedness and risk management. *All-hazards* events were incidents that ranged from accidents and natural disasters to actual or potential terrorist attacks (U.S. Department of Homeland Security, 2008b). Homeland security was a unified national effort to prevent and deter terrorist attacks, protect and respond to hazards, and to secure the national borders (U.S. Department of Homeland Security, 2008a).

**Homeland security was national security.** The 2010 National Security Strategy presumed a *whole of government approach to national security* – an approach that balanced and integrated defense, diplomacy, economic, and homeland security policy. Homeland security was “a seamless coordination among federal, state, and local governments to prevent, protect against and respond to threats and natural disasters” (White House, 2010, p.2). To improve national preparedness, the nation must integrate its domestic all-hazards planning and build key capabilities to respond to emergencies (White House, 2010). National preparedness was “a secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risks” (U.S. Department of Homeland Security, 2011b, p.1).

The U.S. Department of Homeland Security (2014a) maintained that the Deepwater Horizon oil spill in 2010, Hurricane Sandy in 2012, and the Boston Marathon bombing in 2013 illustrated the “evolving” homeland security threat and hazard

landscape. DHS' homeland security vision was "a homeland that is safe, secure, and resilient against terrorism and other hazards, where American interests, aspirations, and way of life can thrive" (U.S. Department of Homeland Security, 2014b, p.14).

**Homeland security perceptions.** Bellavita (2008) maintained that the "truth" about homeland security might be derived from a correspondence view of the truth or a pragmatic view of the truth. A correspondence view of the truth was the objective reality one might derive by discovering what people actually did when they claimed to have done homeland security. A pragmatic view of the truth could be represented by something a fire chief said: "There are lots of definitions, and they will be activated at different times and we each have different roles to play in different scenarios" (Bellavita, 2008, p.2). Identifying the different times, roles, and scenarios that triggered homeland security definitions might produce the pragmatic view of the truth about homeland security.

Bellavita (2008) offered seven defensible definitions of homeland security. Each was based upon a correspondence view of the truth –assertions about what homeland security emphasized or ought to have emphasized: terrorism, all-hazards, terrorism and catastrophes, jurisdictional hazards, meta-hazards, national security, and security *über alles*. *Über alles* is German for a superlative example of a kind or a class (Merriam Webster, 2011). Metaphorically, the definitions represented sets of interests in the homeland security ecosystem.

The terrorism definition was enshrined in the 2002 National Homeland Security Strategy. Homeland security was "a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the

damage and recover from attacks that do occur.” (White House, 2002a, p.3) The all-hazards definition maintained that the skills, equipment, and knowledge needed to respond to most emergencies would also come into play when people were needed to respond to terrorism. The terrorism and catastrophes definition held that homeland security was about preventing terrorism and mitigating disasters.

The jurisdictional hazards definition held that homeland security meant something different in each jurisdiction. The focus was on how jurisdictions actually treated homeland security rather than how they defined homeland security. The meta-hazards definition held that homeland security could be about practically anything. Jurisdictional hazards were opposite meta-hazards on the homeland security ecosystem continuum. The former was tailored to individual jurisdictions. The latter focused on hazards that affected everyone in the nation. Accordingly, homeland security could be a national effort to prevent or mitigate any social trend or threat that could disrupt the long term stability of the American way of life. The national security definition held that homeland security was an element of national security that worked with other instruments of national power to protect the sovereignty, territory, domestic population, and critical infrastructure of the U.S. against threats and aggression. The *über alles* definition suggested that homeland security was about justifying government efforts to curtail civil liberties (Bellavita, 2008).

Bellavita (2008) found that law enforcement officials favored the terrorism definition. Emergency managers and fire service officers preferred the all hazards definition. People who worked for federal agencies chose the terrorism and major catastrophes definition. DOD saw homeland security as something that civilians did.

The community that selected the national security definition was small but growing. There were few proponents of the jurisdictional, meta- hazards, and *über alles* definitions. If your colleagues believed homeland security was about terrorism, all hazards, or other things, then that was your “truth.” Those truths created semantic stovepipes that insisted on one worldview. People who were involved with homeland security should have talked to each other about those issues to dissolve stovepipes. Such conversations would evolve the homeland security ecosystem.

**Education for the new national calling.** McIntyre (2002) argued that homeland security was the most complex challenge ever undertaken by the U.S. government. The nation, however, had no idea what to do to prepare for, recognize, or reverse the threat. A progressive program of professional education in homeland security was essential. At a minimum, a common curriculum that addressed modern terrorist threats and identified the national resources available to counter those threats was necessary. U.S. colleges responded to the call for academic programs that would provide professionals with the knowledge and skills to meet the nation’s homeland security educational requirements (Carnevale, 2005; Center for Homeland Defense and Security, 2008, 2011; Charting a Course for Homeland Security Strategic Studies Conference, 2005; Committee on Educational Paradigms for Homeland Security, 2005; Gearon, 2011; National Research Council, 2005; Noftsinger, Newbold, & Wheeler, 2007; Winegar, 2008).

**Foundations.** Homeland security education began as an inquiry into the preparedness for the threat of weapons of mass destruction. The events of the terrorist attack on the World Trade Center in New York City in 1993 and other major terrorist attacks left the U.S. with the sense that the homeland was vulnerable to attack and the

nation was unprepared (Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction, 1999, 2000; President's Commission on Critical Infrastructure Protection, 1997; U.S. Commission on National Security/21<sup>st</sup> Century, 2001; White House Commission on Aviation Security, 1997). In 1998, the DOJ established the Office of Domestic Preparedness (ODP) to enhance domestic preparedness capacity within state and local governments to assure effective response to weapons of mass destruction incidents. ODP asked: Who should be trained? What tasks should they be trained to perform? Which training instruction/delivery methods and training sites should be paired with which tasks to maximize success in training? What methods are most capable of evaluating competency and performance upon completion of training? What gaps need to be remedied in existing training? (Pelfrey et al., 2002).

ODP identified 10 key disciplines and the tasks that they would need to accomplish to respond to weapons of mass destruction incidents. The disciplines included: emergency medical services, emergency management agency, fire, governmental administration, health care, hazardous materials, law enforcement, public health, public safety communications, and public works. ODP identified 152 tasks that were necessary prior to, during, and after an incident involving weapons of mass destruction. The majority of the tasks fell into the lower half of the cognitive domain and 32 of the tasks were complex and operated at the higher levels of the cognitive domain (Pelfrey et al., 2002). Bloom, Engelhart, Furst, Hill, and Krathwohl (1956) classified learning objectives into three domains: cognitive, affective, and psychomotor. The cognitive domain included, in progressive order, knowledge, comprehension, application, analysis, synthesis, and evaluation.



ODP developed training programs to address tasks that fell in the lower order cognitive domain. In addition, the office helped establish CHDS to provide graduate level education for select members of the homeland security enterprise. The terrorist attacks of September 11, 2001 accelerated the inquiry into the preparedness for the threat of weapons of mass destruction and the emergence of the homeland security discipline. CHDS became the nation's homeland security education leader, homeland security education associations emerged, homeland security education conferences and workshops proliferated, and over 290 colleges established over 400 homeland security programs (Center for Homeland Defense and Security, 2014b, 2014c, 2014d; Pelfrey et al., 2002).

**Evolution of homeland security higher education.** CHDS was established in April 2002 to strengthen the national security of the U.S. by providing evidence-based graduate level educational programs and services that met the leadership needs of organizations responsible for homeland defense and security. The center was housed at the Naval Post Graduate School in Monterey, California. CHDS' programs and resources included a masters' degree program, an executive leaders program, executive education seminars, a fusion center leaders program, self-study courses, the Homeland Security Digital Library, the *Homeland Security Affairs* journal, and the University and Agency Partnership Initiative (Center for Homeland Defense and Security, 2014a).

Bellavita and Gordon (2006) provided an insider's view of CHDS. Bellavita was the director and Gordon the associate director of academic programs. They described how particular elements were selected from the uncertainty that was homeland security to fashion an evolving homeland security curriculum in in their Introduction to Homeland Security course. Homeland security was in a pre-paradigm stage. Colleges, agencies,

and textbooks conceptualized homeland security education in at least 51 different ways (Appendix B). While they did not know enough about homeland security to say with certainty which subjects should be addressed, Bellavita and Gordon knew that homeland security included an understanding of terrorism, homeland security laws and strategies, and homeland security programs. The Introduction to Homeland Security course was predicated upon 12 broad homeland security leader competency domains (Appendix C) and a constructed narrative. The narrative held that homeland security leaders operated in a domain categorized by problems and opportunities. The problems, opportunities, solutions and visions existed within a multidimensional, social, political, and technical environment that influenced what constituted effective action.

CHDS' graduate program was evaluated extensively both internally and externally. The initial graduate curriculum was developed by ODP and the Naval Post Graduate School from the university's curricula and by creating other courses where gaps occurred (Appendix D). Each course was assessed continuously for relevance and value of course content. End of course evaluations showed course relevance and overlap and resulted in the replacement of courses and modification of others (Pelfrey, 2013; Pelfrey & Pelfrey, 2009). CHDS' current graduate curriculum was available on the center's website (Appendix E) (Center for Homeland Defense and Security, *n.d.*).

Ryan (2009) concluded that CHDS had successfully created an effective masters' degree in security studies (homeland security). The graduate program incorporated what Haworth and Conrad (1997) referred to as five emblems of a quality program in higher education: diverse and engaged participants; adequate resources and support; interactive teaching and learning; connected program requirements; and a participatory culture.

CHDS was a model community of learners. Demonstrable contributions to the discipline of homeland security were evidenced by students' white papers, service on subject matter expert panels and visiting fellows, and thesis that revealed enthusiasm for reframing homeland security efforts. The graduate program, however, was limited to a small cadre of homeland security leaders from federal, state, local, and tribal governments. As of May 2014, 590 students graduated from the graduate program (H. Issvoran, personal communication, May 19, 2014). Due to congressional constraints, members of the private sector were not eligible to attend the CHDS graduate program. The relatively small number of participants and exclusion of the private sector created an educational gap and parallel demand for alternative opportunities at public and private homeland security educational institutions (Center for Homeland Defense and Security, 2008; Congressional Budget Office, 2004).

The University Agency Partnership Initiative (UAPI) was established in 2005 to share CHDS' resources with the nation's academic institutions to build national homeland security preparedness through education. UAPI hosted educational summits and workshops and maintained a member subscribed website that provided members with access to UAPI course materials. In 2009, a UAPI-facilitated workshop produced recommendations (Appendix F) for undergraduate homeland security curricula. UAPI membership grew to over 1,200 academic partners from over 330 colleges and agencies who shared their curricula and expertise with the center and its partners (Center for Homeland Defense and Security, 2014a, 2014b, 2014d). UAPI Director, Dr. Stanley Supinski noted that UAPI reached out to its members via its website forum and that many of its "partners have not adopted our model, but our materials." (S. Supinski, personal

communication, October 31, 2013) UAPI's website originated as a forum on the CHDS website and was converted to its own Internet domain in December 2009 and has had over 168,000 site visits (W. Colie, personal communication, June 10, 2014). In addition to UAPI initiatives, CHDS has capitalized on what it referred to as the multiplier-effect: graduates that go on to spread the homeland security message and practice to peers to develop a cadre of professionals. Since the inception of CHDS, at least 90 graduates have taught homeland security courses at over 85 different institutions at the undergraduate and graduate levels as well as directing training classes (Center for Homeland Defense and Security, 2013).

In 2003, U.S. Northern Command established the Homeland Security and Defense Education Consortium to promote education that supported its bifurcated mission. The unified combatant command was established in the wake of September 11, 2001 to defend the homeland and to provide support to civil authorities. The consortium evolved into a network of homeland security academic institutions and organizations that promoted education that would enhance members' understanding of each other's roles, responsibilities, and capabilities. The consortium sponsored the HS Curriculum Workshop, the Workshop on National Needs, and the Homeland Security and Academic Environment study. In 2007, the consortium's membership exceeded 250 colleges and other agencies (Homeland Security and Defense Education Consortium, 2006; Homeland Security and Defense Education Consortium Association, 2009a; Robinson, 2006).

The HS Curriculum Workshop explored homeland security graduate content options and offered recommendations for a graduate program (Appendix G) (Homeland Security and Defense Education Consortium, 2005). The Homeland Security and

Academic Environment study found that scholars had not reached consensus on what homeland security was or what constituted a homeland security course. The homeland security academic discipline was an evolving ungoverned environment of numerous programs claiming to prepare students for various positions of responsibility. Colleges were augmenting existing courses and launching entire programs around security, defense, and terrorism related issues to attract federal funding, recruit new students, and prepare graduates for careers in homeland security. Some schools focused on research while others concentrated on degree granting programs and certificates. Before there would be agreement and recognition of homeland security as an academic undertaking, the discipline must be accepted as a profession (Rollins & Rowan, 2007).

The Workshop on National Needs asked prospective homeland security employers what they expected to gain from hiring people with graduate degrees in homeland security. Participants included representatives from federal, state, and local government and private industry. The single most common desired skill for employees in the homeland security field, was the “ability to read large amounts of material, draw logical conclusions, communicate those conclusions clearly and concisely in writing and orally” (Homeland Security and Defense Education Consortium & Texas A&M University, 2007, pp. 2-3). The single most desired employee quality was “integrity.” The single most desired knowledge for employees was knowledge of existing policy as well as how to work with state and local agencies. Desirable skills included: core knowledge, skills, and abilities and discipline specific knowledge (Homeland Security and Defense Education Consortium & Texas A&M University, 2007).

In 2007, the Homeland Security and Defense Education Consortium decided that the organization had grown beyond the original scope of Northern Command's intent and that it would be more appropriate to convert to a member-run organization. In 2008, the Homeland Security and Defense Education Consortium Association was established to provide a coordinating body that might help develop the homeland security academic community. The association's activities included model curricula, accreditation, and professional development initiatives. In 2009, the association drafted lists of core competencies for undergraduate (Appendix H) and graduate level programs (Appendix I) as part of its accreditation program initiatives (Homeland Security and Defense Education Consortium Association, 2009b, 2009c).

The National Research Council's Committee on Educational Paradigms for Homeland Security (2005) found that the extreme and uncertain nature of homeland security required an educational counterpart with an equally broad, multidisciplinary, and evolving mandate. Homeland security educational programs content ranged from technical prevention to workforce skills development to social understanding. Given the breadth of homeland security, the wide range of homeland security educational programs was appropriate. One theme, however, stood out. Nearly all aspects of homeland security gravitated toward the issue of complex threats and how to manage them. The theme, risk management, might serve as an organizing framework for homeland security education. Homeland security was not a discipline—at least not in the traditional sense. It was an area to which many academic specialties could be applied, but one that required core knowledge in order for the application to occur intelligently. Core knowledge was recommended for anyone planning a career in the homeland security enterprise.

However, no bachelor degree in homeland security per se should be offered. Instead, core coursework should be offered and recognized as a minor, concentration, or certificate.

The Charting a Course for Homeland Security Strategic Studies Conference (2004) maintained that higher education homeland security education curricula should contain core elements (Appendix J) that would help achieve homeland security readiness by producing knowledgeable and highly effective executives. Curricula should: align with homeland and national security; encompass interdisciplinary and global perspectives; emphasize integration; meet multiple stakeholder needs; and promote innovation. The greatest peril facing homeland security education might be the combination of unformed common culture and outside entities following their own instincts and agendas in the absence of appropriate central guidance, and the proliferation of such outside programs.

In 2008, DHS' Transportation Security Administration partnered with higher education institutions to provide its employees with the opportunity to earn an agency certificate of achievement in homeland security and to continue on to earn an associate degree in homeland security or related field. The agency envisioned a program that provided continuing education and career development of its employees by equipping them with critical thinking skills that aligned with the organization's mission and values. The program has since expanded to 87 college partners and all 50 states (Transportation Security Administration, 2013a, 2013b).

In 2008, the California State University Council for Emergency Management and Homeland Security was established as a collaborative network of state colleges, K-12

education, government, and non-governmental organizations. The network facilitated strategic partnerships in the promotion of multidisciplinary academic approaches and solutions in education and research development in emergency management, homeland security, and cyber security (California State University, Council for Emergency Management and Homeland Security, 2012).

In 2013, the International Society for Preparedness, Resilience, and Security was established to facilitate trans-disciplinary collaboration between academics, policy makers, and practitioners that contributed to the homeland security, civil security, and public enterprise. The global organization focused on preparedness, mitigation, emergency management, security, resiliency, and related public sector education and training initiatives and higher education. Initial goals included setting education standards and supporting accreditation in higher educational programs for homeland security and similarly named programs. The organization had over 490 members that represent 13 nations (International Society for Preparedness, Resilience, and Security, 2013; J. Ramsay, personal communication, April 1, 2014).

Renda-Tanali (2012) noted, notwithstanding the Homeland Security and Defense Education Consortium Association' accreditation initiatives, no consensus on what constituted a common body of homeland security knowledge existed. No professional organization took charge of, or offered a vetted set of program-level outcomes. One reason for the lack of consensus was the complex, dynamic, multidisciplinary, and interdisciplinary nature of homeland security. She also noted movements for the fields of homeland security and emergency management to come together and particularly the



consortium's plans to introduce a homeland security track to the Federal Emergency Management Agency's (FEMA) Emergency Management Institute.

**Multiple disciplines.** Supinski (2011, 2012, 2014) held that academia responded to the events of September 11, 2001 by developing what many viewed as a new academic discipline. Homeland security was a combination of three existing areas: emergency management, public administration, and national security affairs. The majority of homeland security programs were linked to three primary content areas: criminal justice, emergency management, and public administration, but also resided in political science, history, psychology, public health, law, and other academic departments. Homeland security academics and operations were inter and multidisciplinary in nature and made for exciting times in terms of research and education. Kiltz (2009, 2011) argued that the success of the homeland security enterprise was dependent on its ability to work collaboratively across disciplines to prepare homeland security and emergency management professionals and to conduct research that enhanced our understanding of the complexity of the homeland security enterprise. Homeland security education curricula must be multidisciplinary/interdisciplinary, include core competencies including emergency management, and help develop public servants with a public service ethos and citizens who embodied civic virtues.

Smith (2005) evaluated undergraduate and graduate homeland security syllabi. He found numerous concepts, threads, and topics that made it difficult to accurately construct one inclusive definition of homeland security. There was little agreement about what constituted homeland security. Topical coverage seemed to be heavily grounded in a variety of disciplines that suggested an interdisciplinary focus for many courses. The

syllabi suggested that homeland security was a system of emergency preparedness that required military and civilian response to perceived, potential, or eminent threats against U.S. citizens and interest at home.

Drabek (2007) argued that homeland security and emergency management would be constrained by cultural differences, governmental policies, and disaster events.

Clement (2011) found that there was no widely-accepted body of emergency management-homeland security knowledge put forward by the academic community.

McCreight (2009, 2011) argued that emergency management and homeland security professionals were operational cousins. However, core emergency management and homeland security curriculum, offered no consensus about what mattered. Neither DHS nor any professional association agreed upon a common benchmark standard for collegiate education. Homeland security and emergency management needed all hazards educational programs aimed at enhancing terrorism prevention, preparedness, and response. Moreover, without a benchmark standard in emergency management and homeland security the discipline of public administration becomes even “murkier” as public policy matters diffuse into ambiguous directions.

Steward and Vocino (2013) found that homeland security and emergency management were important topics within the field of public administration. Kettl (2003, 2007) argued that homeland security was fundamentally about the ageless problem of coordinating administrative work. Coordination was both the diagnosis of homeland security problems and the diagnosis of its failures. Homeland security required contingent coordination, “a sophisticated approach that builds on existing administrative structures and policy capacity but which pulls them together, effectively, when they are

needed, as they are needed” (Kettl, 2003, p.254). Jones and Givens (2011) argued that homeland security was integrated across a range of policies and programs within a highly decentralized and intergovernmental context. Public Administration was at “the core of homeland security being essential for the success of the many professional practices involved” (p.69) suggesting that graduate-level public administration and public policy degrees in homeland security would be offered in the future.

Pelfrey and Pelfrey (2009) found that homeland security like public administration was striving to go beyond professional training by establishing and encompassing a growing body of knowledge, linking that body of knowledge to critical inquiry, and extending that body of knowledge through research. Similarly, Plant, Armino, and Thompson (2011) found that homeland security, like public administration was striving to find a way to relate theory to practice, and education to professional identity. They offered Pennsylvania State University’s Intercollegiate Masters in Professional Studies in Homeland Security as a balance of common and specific subject matter that corresponded to homeland security’s need to evolve as a loosely coupled but emergent procession. The program assumed a matrix approach to homeland security education that included concentrations in: management, public health, geospatial intelligence, computer and network security, information security and forensics, and agricultural biosecurity.

Louden (2007) maintained that the police typically play a leading role during disasters. Criminal justice was the ultimate multidisciplinary discipline that drew from emergency management, political science, public health, public management, psychology, and sociology. Williams, McShane, and Karson (2007) maintained that

homeland security represented a “profound and fundamental change” in the social, legal, and political landscape (p.165). Criminal justice curriculum complete with security management, organizational theory, public administration, international justice, and existing core curricula and particularly statistical and data analysis could inform and educate homeland security practitioners as well as legislators, administrators, and policy makers. Criminal justice programs will actively develop a security sub-discipline to meet homeland security’s academic requirements. Ryan and Klinger (2012), however, found that the discipline of homeland security had not yet included input from existing fields such as criminal justice, political science, and public administration. In developing Pace University’s graduate homeland security curricula, they built upon CHDS curricula by focusing on leadership development and the selection of courses that would strengthen and develop critical thinking by public safety officers and homeland security leaders.

Church (2008) argued that homeland defense and homeland security were dependent on unity of effort. Multiple agencies, public and private, must transcend jurisdictional boundaries to defend and secure the homeland. Homeland defense and homeland security required an interdisciplinary educational model to advance the elements of unity of effort and collaborative capacity. The CHDS cohort model should be applied in DOD professional military education, fire and law enforcement academies, Department of State training, and other educational forums to fill the void created from a lack of a National Security University. UAPI and HSDECA would provide sample curricula and accreditation potential to the educational programs.

Ramsay, Cutrer, and Raffel (2010) maintained that the lack of consistent core homeland security curricula was attributable, at least in part, to a lack of a professional

association that could offer a vetted set of program-level student learning outcomes and an accrediting organization to perform program accreditation. Using the Delphi method, they developed and tested a consensus set of core academic areas that could be used to represent the breadth of the homeland security enterprise in an undergraduate curriculum and to develop and examine a consensus set of educational objectives and program learning outcomes. Study participants were homeland security professionals with educational and professional credentials in a variety of areas involving homeland security. The participants identified three educational objectives (Appendix K), six general program-level outcomes (Appendix L), and eight core academic areas and student learning objectives (Appendix M). However, the study did not reflect all operational areas of homeland security. Therefore, the degree to which the outcomes identified were representative of the skills, knowledge, and behaviors practitioners need to have to function appropriately would need to be demonstrated. Ramsay (2013) maintained that if homeland security evolves the way medicine, nursing, law, and engineering have, a formal and widely understood and adopted accreditation mechanism would provide significant benefits to quality control, legitimacy and professionalism.

Travis and Bradshaw (2012) used the Delphi method to identify, validate, and prioritize appropriate subject areas for baccalaureate curricula in homeland security. Study participants were directors of homeland security at the state, province, and territorial level. Fourteen major content areas were identified and eight were selected as being important enough to be considered for inclusion in homeland security curricula. Thirteen subjects were identified from the major content areas as suitable for workable curricula with 90% of all participants agreeing that curricula should focus on all-threats and all-hazards (Appendix O).

Ramirez and Riox (2012) surveyed over 5,000 DHS employees from Customs and Border Protection, Transportation Security Administration, Immigration and Customs Enforcement, and Citizenship and Immigration Services nationwide as to what they believed were relevant subjects and courses in homeland security college curricula. According to DHS respondents, Terrorism and Fundamentals of Homeland Security ranked as the two most important courses for homeland security curricula. Five of the next six ranked courses were related to general education and included Critical Thinking/Analytical Skills, Ethics, Technical Writing, English Composition, and Informational and Oral Communications. Analysis of the data by agency pointed to some differences in the importance of subjects for an undergraduate education in homeland security which could relate to the responsibilities of the agency. For example, Border Protection agents indicated that Spanish was the most important subject. The assessment indicated that homeland security curricula should include general education, homeland security operations and procedures, law, and disaster response and mitigation.

**Multiple approaches.** Alexander and Johnson (2009) argued that, in the post-September 11, 2001 era, the U.S. government needed higher caliber homeland security and intelligence professionals. Government and private institutions that provided undergraduate, graduate, and professional training did not provide the requisite thoroughness and tailored academic exposure. They proposed a Homeland Security Intelligence Academy that would produce tier-one education and training for future homeland security and intelligence-focused professionals. Moore, Hatzadony, Cronin, and Breckenridge (2010) argued that small private liberal arts colleges were ideal environments to educate security and intelligence professionals. The colleges had strong

commitments to teaching, low student-to-faculty ratios, and greater ease for student interactions with faculty. Liberal arts educated students trained their minds to think critically and gained a holistic understanding of the world. Notre Dame College's Bachelors of Arts in History with an Intelligence Studies Emphasis and Masters of Art in Security Policy Studies were exemplars of career-oriented academic programs that prepared students for national security positions. The undergraduate curriculum was designed to teach students basic skills needed to compete successfully for entry-level intelligence positions. Intelligence practitioners were asked what skills a prospective intelligence analysis should possess. The universal response emphasized good critical thinking, reasoning, analytical abilities, communication skills, and good computer skills. Repeatedly, practitioners opted for a solid liberal arts education as the foundation for preparing future analysts. The graduate curriculum was predicated on the finding that staff office level positions required strategically-oriented and policy focused instruction.

Collier (2012) offered Eastern Kentucky University's experience in developing its undergraduate homeland security curriculum as a guide for developing a homeland security program. One of the biggest challenges in developing a new academic program was balancing new curriculum content with the expertise of existing and anticipated new faculty. The university used the Center for Homeland Defense and Security (2009) model undergraduate curriculum, benchmarked other undergraduate homeland security programs, and worked with the Homeland Defense and Security Consortium Association as it worked to become the specialized accrediting body for homeland security academic programs. In 2007, the university rolled out its Bachelors of Science in Homeland Security that balanced its curriculum with the capabilities of existing faculty. New

faculty members with national security policy/intelligence and state/federal emergency management backgrounds were hired and provided fresh experiences to a review of the curriculum. In 2009, the undergraduate curriculum (Appendix N) was revised to include four new courses and seven new supporting courses.

Persell and Speraw (2008) concluded that homeland security nursing was a new and necessary role in nursing. Nurse leaders who manage and respond to worldwide mass casualty incidents must look to new and innovative methods of education and training if they are to prepare and execute comprehensive plans for major public health emergencies. They offered the University of Tennessee at Knoxville's graduate degree in nursing with a concentration in homeland security as an opportunity to garner the requisite expertise to provide such care. The degrees built upon the Columbia University School of Nursing Center for Health Policy's (2001) and the International Nursing Coalition for Mass Casualty Education's (2003) public health competencies for nurses responding to mass casualty incidents. The homeland security curricula included courses in homeland security threats, planning, ethics, management, and leadership and how they related to nursing (University of Tennessee at Knoxville, 2014).

Polson, Persyn, and Cupp (2010) offered the development of the Kansas State University and U.S. Army Command and General Staff College Homeland Security Graduate program as an aid to colleges considering the development of regionally-responsive homeland security graduate programs. Program development was threefold. First, the institutions identified the Homeland Security and Defense Education Consortium's content area recommendations (Appendix G) and DOD's Homeland security competencies (Appendix P) as predicates for their program. Second, the



institutions conducted a Regional Homeland Security Educational Needs Analysis Workshop to collect data that could help shape the development of a viable homeland security graduate program designed to serve the diverse needs of homeland security professionals throughout the Midwest. The workshop identified 15 discrete region-defined core competencies that highlighted the need for an interdisciplinary program to address each of those diverse competencies. Third, the results were correlated with the Homeland Security and Defense Education Consortium's content area recommendations and DOD's Homeland security competencies (Appendix Q). Core courses were defined to address the foundational and interdisciplinary program objectives that focused on: Foundations of Homeland Security, Homeland Threats, Organizations amid Crisis, Homeland Security Processes and Management, and Homeland Security in Practice.

Preston, Armstrong, and McCoy (2010) offered the development of Colorado Technical University's Doctor of Management with a Concentration in Homeland Security curriculum as a means to change the elusive area of homeland security from what it is today to a mature, evolved presence not only in the U.S. but around the globe. The development process comprised a review of CHDS' graduate curriculum and the assembling of an advisory board of homeland security subject matters experts. The advisory board found that homeland security practitioner concerns included: poor intra and interagency communication, lack of structure, inadequate coordination of plans prior to crisis, silos, limited external planning, and confusion over who was in charge in varying situations. The advisory board developed a homeland security doctoral curriculum that would help develop trans-organizational solutions and skill sets necessary for large-scale interventions for seemingly unsolvable problems. The curriculum, four

homeland security courses and eight management courses with an emphasis on homeland security (Appendix R), was designed for a cohort construct that would share perspectives and approaches and ultimately help solve the unsolvable problems. The cohort construct and the blending of many theoretical fields facilitated authentic practitioner and researcher interaction.

**Ways forward.** Homeland security higher educational programs traversed numerous disciplines at the undergraduate and graduate levels. Still, the question remained what should higher education do to prepare students for homeland security. Palin (2010), Pelfrey and Kelley (2013), Collier (2013), CHDS Futures Advisory Committee (2013), U.S. Department of Homeland Security Academic Advisory Council (2012, 2013, 2014a, 2014b), and McCreight (2014) offered ways forward for homeland security higher education.

Palin (2010) maintained that homeland security academic programs should focus on the properties of change. As a new or “at least a potential discipline,” homeland security should avoid Newtonian precepts of mechanistic cause and effect (p.9). Homeland security should develop an Aristotelian framework for engaging the reality of change. The framework combines different mindsets and skillsets to identify what we know about what changes and what does not change to begin to observe reality as a whole. Testing and refining this framework is essential to any meaningful profession of homeland security:

Did our action produce a result consistent with our purpose? Did we understand our purpose to sufficiently calibrate it with what we know about change and changelessness, about material and formal reality? Was our choice of action well-

suiting to reality? Did we nudge emerging reality in our desired direction or did we unleash an unintended consequence that upended our purpose? (Palin, 2010, p.10)

Learning to ask these questions may be the most important aspect of academic preparation for homeland security.

Pelfrey and Kelley (2013) argued that homeland security education raised the nation's potential for being prepared. "Education tends to enhance the performance of strategic, complex cognitive tasks, such as planning, coordination, and achievement of consensus" (p.2). They asked graduates and faculty of CHDS' master's program and homeland security subject matter experts five fundamental questions in the context of an overarching goal of national preparedness. Who should be the consumers of homeland security education? What is the effect of homeland security education? What learning objectives and capabilities should be the foundation of homeland security education? What courses and curricula best serve as vehicles for educating the appropriate students on the appropriate objectives and capabilities? Are established, more mature, parallel disciplines better capable of educating students in the appropriate capabilities?

Pelfrey and Kelley (2013) found that the most appropriate students for homeland security education were practitioners with leadership and administrative responsibilities. The most appropriate tier of education was at the first graduate level. Homeland security education could help prepare professionals to operate in ambiguous environments and to engage in strategic collaboration and critical thinking. There was little agreement on what courses/curricula best served the needs of homeland security professionals. Established programs in other fields and disciplines did not offer the requisite objectives

and capabilities of homeland security education. Ways forward for homeland security education included: graduate education that emphasized strategic collaboration, critical thinking, and the ability to operate in ambiguous environments; assessing the impact of homeland security education; disseminating the results to colleges with recommendations of smart practices; and engaging existing disciplines to adopt homeland security issues in their research and graduate education (Pelfrey & Kelley, 2013).

Collier (2013) argued that despite the lack of a consistent definition of homeland security (Reese, 2013), the community of homeland security educators had made progress toward establishing undergraduate and graduate curriculum standards. The Center for Homeland Defense and Security's (2009) model undergraduate homeland security curriculum, and the Homeland Security and Defense Consortium Association's (2009b, 2009c) drafts of specialized accreditation standards for graduate and undergraduate homeland security programs revealed a growing consensus of both the academic and professional communities. It was "probably time to recognize that the most recent approaches to undergraduate teaching and learning ensure graduates have the substantive knowledge and professional skills which were in the past mainly developed in graduate programs" (Collier, 2013, para. 1).

The Center for Homeland Defense and Security Futures Advisory Committee (2013) queried the CHDS "family" and other homeland security professionals with respect to their views as to homeland security threats and challenges that were either new or emerging challenges or existing challenges that would persist. Respondents identified 18 critical trends within the homeland security enterprise (Appendix S). Respondents also identified three process-related issues having to do with skill sets needed for higher

education: leadership development and strategy/problem solving; critical thinking, analytical skills, and higher level reasoning; and exposure to people from other disciplines.

The U.S. Department of Homeland Security (2008a, 2014a) maintained that the department did not carry out the homeland security mission alone. Homeland security depended upon all levels of government, the private sector, academia, and the general public working together collaboratively. The DHS Homeland Security Academic Advisory Council (HSAAC) was established in March, 2012 to provide advice and recommendations to DHS on matters related to homeland security and the academic community. The U.S. Homeland Security Academic Advisory Council (2012, 2013) recommended that: DHS and CHDS establish a definition of homeland security academic programs to serve as a guide for program development; CHDS should convene a workshop to review and update the suggested graduate curriculum; and CHDS, DHS, and the Transportation Security Administration should develop outlines for certificate, associate, and bachelors programs that provided clear pathways for progressive movement from certificate to associate to bachelors' degree. HSAAC noted that the DHS National Study of Homeland Security Curricula was underway.

The DHS Office of Academic Engagement reported that it was working across the department and with a number of partners including FEMA and CHDS to compile foundational information for the National Study of Homeland Security Curricula. They were developing the study in conjunction with the creation of the National Training and Education System the objectives of which were to: improve the knowledge and core capabilities of homeland security professionals; build and sustain a community of

practice for homeland security training and education; and establish a defined career path with associated training and education requirements for emergency management professionals (L. Kielsmeier personal communication, April 26, 2014).

The U.S. Department of Homeland Security Academic Advisory Council (2014a) recommended that DHS should consider new training partnerships between DHS and academic organizations that provide participants the opportunity to earn academic credit for homeland security coursework. DHS should explore opportunities to leverage an academic credit-based professional education model, such as the DOD's Defense Activity for Non-Traditional Education Support, to provide department employees with access to continuing education. The U.S. Department of Homeland Security Academic Advisory Council (2014b) reported that DHS was progressing on its recommendations related to: prioritizing and promoting DHS research projects; expanding DHS cooperation with DOD academic schools; support of international education initiatives; campus resilience; recruiting student interns and veterans to DHS and particularly cyber security positions; and partnering with academics to build a pipeline of diverse students in science, technology, engineering, and mathematics.

McCreight (2014) found that homeland security was a shared enterprise between Washington, the 50 states, and major U.S. cities. The DHS role in the enterprise did not afford the department the authority and oversight to help shape curriculum. Academia was largely on its own and must look to itself for sensible solutions. He called for a college and university conclave that would upgrade existing homeland security curricula; revise and update relevant textbooks; identify key topics and issues; reach agreement on core courses; examine DHS functional issues and translate them into viable course

materials; discuss skill sets deemed essential for successful performance in homeland security; and discuss various simulation and exercise options for possible classroom use.

Recommendations for homeland security higher education ranged from undergraduate to graduate degrees and certificates that were multidisciplinary and/or interdisciplinary and emphasized terrorism, strategic collaboration, risk management, critical thinking, preparedness, and numerous others. There was, however, little agreement about what homeland security was or how to best prepare college students for homeland security. There was little in the way of substantive change since Rollins and Rowan (2007) found that the homeland security academic discipline was an evolving ungoverned environment of numerous programs claiming to prepare students for various positions of responsibility. The review of the literature raised the question, how do college homeland security curricula prepare students for homeland security currently? Before homeland security higher education moves forward, there is a need to assess what is being taught in U.S. colleges' homeland security programs.

### **Chapter Summary**

The review of the literature chronicled the emergence of the homeland security enterprise and higher education's efforts to prepare students for roles in the enterprise. Homeland security was a wicked problem that was produced by events that initiated and sustained multiple issue-attention cycles. The terrorist attacks of September 11, 2001 and the events of Hurricane Katrina in the summer of 2005 demonstrated that the nation was not prepared for twenty-first century threats. The U.S. government attempted to bind the evolving intentional, natural, and accidental threats of the twenty-first century into effective homeland security policies. The result was at least eight different U.S.

government definitions of homeland security (Appendix A) that approached different threats with distinct policies. The U.S. government did not, however, have a consensus or common definition of homeland security.

Bellavita (2008) offered seven defensible definitions of homeland security based upon a correspondence view of the truth –assertions about what homeland security emphasized or ought to have emphasized: terrorism, all-hazards, terrorism and catastrophes, jurisdictional hazards, meta-hazards, national security, and security *über alles*. Law enforcement officials favored the terrorism definition. Emergency managers and fire service officers preferred the all hazards definition. People who worked for federal agencies chose the terrorism and major catastrophes definition. DOD saw homeland security as something that civilians did. The community that selected the national security definition was small but growing. There were few proponents of the jurisdictional, meta- hazards, and *über alles* definitions. Different disciplines perceived homeland security different ways.

Homeland security education began as an inquiry into the preparedness for the threat of weapons of mass destruction. The terrorist attacks of September 11, 2001 accelerated the inquiry into the preparedness for the threat of weapons of mass destruction and the emergence of the homeland security discipline. CHDS was established in April 2002 to strengthen the national security of the U.S. by providing evidence-based graduate level educational programs and services that met the immediate and long-term leadership needs of organizations responsible for homeland defense and security. CHDS' programs and resources included a masters' degree program and the UAPI. The UAPI was established in 2005 to share the center's programs and resources



with the nation's academic institutions to build national homeland security preparedness through education. UAPI's membership grew to over 1,200 academic partners from over 330 colleges and agencies (Center for Homeland Defense and Security, 2008, 2014b).

CHDS became the nation's homeland security education leader, homeland security education associations emerged, homeland security education conferences and workshops proliferated, and over 290 colleges established over 400 homeland security programs. Homeland security higher education programs ranged from undergraduate to graduate degrees and certificates that were multidisciplinary/interdisciplinary and emphasized strategic collaboration, critical thinking, preparedness, risk management, and others. There was, however, little agreement about how to best prepare students for homeland security. The review of the literature review raised the question, how do college homeland security curricula prepare students for homeland security currently?

## **Chapter 3: Research Design Methodology**

### **Introduction**

The review of the literature related to homeland security higher education suggested that there was little consensus about what homeland security was and how college homeland security curricula prepare students for homeland security. Over 290 of the nation's colleges offered undergraduate/graduate level homeland security curricula. However, no common or core curricula standard existed for homeland security higher education at any level. In order to obtain data on current homeland security higher education curricula in the U.S., an Internet-based survey was developed to measure how colleges developed, categorized, and ensured that their homeland security curricula remained current as homeland security needs changed. The survey gathered information from college faculty whose institutions offered higher education homeland security curricula.

Using the Center for Homeland Defense and Security's (CHDS) University Agency Partnership Initiative's (UAPI) database of homeland security educators, surveys were emailed to 578 UAPI homeland security educators identified as faculty at colleges in the U.S. that offered homeland security curricula. The use of a quantitative research survey was appropriate for this research, as the goal was to obtain self-reported information from a sample of the population and to extrapolate this information to assess industry practices (Dillman, Smyth, & Christian, 2009; Fowler, 2009).

An analysis of the response data was conducted using IBM Statistical Package for the Social Sciences® data analysis software (hereafter SPSS). These data were used to answer the research questions.

Owing to the unresolved debate about the efficacy of undergraduate homeland security curricula (Bellavita, 2012; Collier, 2013; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Morton, 2012; Pelfrey & Kelley, 2013; Pelfrey et al, 2002), undergraduate and graduate homeland security curricula were analyzed separately. Research questions one to three examined undergraduate homeland security curricula. Research questions three to six examined graduate homeland security curricula. The research questions are as follows:

1. How do colleges develop their undergraduate homeland security curricula?
2. How do colleges categorize their undergraduate homeland security curricula?
3. How do colleges ensure that their undergraduate homeland security curricula remain current as homeland security needs change?
4. How do colleges develop their graduate homeland security curricula?
5. How do colleges categorize their graduate homeland security curricula?
6. How do colleges ensure that their graduate homeland security curricula remain current as homeland security needs change?

### **Research Context**

All research participants were faculty at various U.S. colleges that offered homeland security curricula. College faculty was defined here as Professors, Associate Professors, Assistant Professors, Specialist Professors, Lecturers, Instructors, and Chairpersons (department), Program Coordinators/Directors/Managers and Adjunct Professors. Associate/assistant positions as in Associate Chair were also included. UAPI's database of homeland security educators (Center for Homeland Defense and Security, 2014c) served to identify and contact the research study population. The

research population, described as the entire group of persons or institutions that the researcher wants the study to generalize (Vogt & Johnson, 2011), was comprised of UAPI members that were identified as faculty at a U.S. college.

The research format consisted of a quantitative survey. The survey design consisted of fixed-response multiple-choice questions; fixed-response multiple-choice questions with the option to select an open-ended response choice with space to comment if none of the fixed answers were applicable to colleges' homeland security curricula; fixed-response matrix questions, and fixed-response matrix questions with the option to select an open-ended response choice with space to comment if none of the fixed answers were applicable to colleges' homeland security curricula.

Prospective study participants received an Internet-based survey sent to their email address via Qualtrics®, an on-line survey tool. The questions were relevant to: the levels of homeland security curricula offered at participants' colleges (undergraduate and graduate); participants' positions at their colleges (full-time or part-time faculty); participants level of involvement in the development, categorization, and ensuring that their colleges' homeland security curricula remained current; and how participants' colleges developed, categorized, and ensured that their homeland security curricula remained current. In addition, participants were asked to provide demographic data on their colleges including: year that homeland security program was established; name and the academic background of faculty of departments that housed institutions' homeland security programs; type (public or private, four-year or two-year, military); and geographical location. In addition, an open-ended comment box at the end of each subsection and at the end of the survey was provided for participants to add additional

information related to their colleges' homeland security program that participants felt was related to the study.

The researcher ensured that identifying information on the survey, including the identities of the research participants and their affiliated institutions remained anonymous.

### **Research Participants**

Participants for this research study consisted of homeland security educators who were faculty at colleges in the U.S. that offered homeland security curricula. The researcher solicited the participation of college homeland security faculty that was identified as such in the UAPI (Center for Homeland Defense and Security, 2014c) homeland security educator database. UAPI was an organization of over 1,200 homeland security educators and over 330 colleges and agencies in the U.S. that had a vested homeland security interest. The purpose of UAPI was to share CHDS' programs and resources with the nation's academic institutions to build national homeland security preparedness through education. UAPI was recognized in the homeland security higher education sector as a source of information and guidance on current homeland security higher education initiatives. It was appropriate to use the members of this organization as research participants as they represented faculty at colleges nationwide that offered homeland security curricula. Participants' names and their affiliated colleges were anonymous.

### **Instruments Used in Data Collection**

The study used a quantitative Internet-based survey to measure how colleges developed, categorized, and ensured that their homeland security curricula remained

current. The survey included separate questionnaires for undergraduate and graduate homeland security curricula. The first section consisted of an informed consent form (Appendix T). The survey questions (Appendix U) were based on a lack of consensus about how colleges developed, categorized, and ensured that their homeland security curricula remained current.

This study for education purposes used human research participants and was subject to ethical and legal guidelines. The structure and content for this research study, the survey instrument, was submitted and approved by St. John Fisher College's Institutional Review Board for research approval (Appendix V).

A three-part Internet-based survey was emailed to prospective research participants. Prospective participants were also notified via a UAPI Internet-based forum that provided a direct link to the survey instrument. The first section consisted of an informed consent form explaining the intent of the study, the method of protecting each participant's anonymity, and the participant's rights regarding the research study. Study participants were asked to read and electronically acknowledge consent to participate in the study. The survey asked participants to answer each question in the second and third section by electronically checking radio buttons, placed under or beside each question, which most correctly aligned with their colleges' homeland security curricula or demographic information.

The second section was subdivided into three major subsections: screening questions, undergraduate homeland security curricula, and graduate homeland security curricula. The undergraduate and graduate subsections were further subdivided into three

subsections; development of homeland security curricula, categorization of homeland security curricula, and ensuring the homeland security curricula remained current.

The second section of the survey contained: closed-ended fixed-response multiple choice questions; fixed-response multiple-choice questions with the option to select an open-ended response choice with space to comment if none of the fixed answers were applicable; fixed-response matrix questions; and fixed-response matrix questions with the option to select an open-ended response choice with space to comment if none of the fixed answers were applicable. Nine multiple choice questions offered the response option *other (please specify)* and provided participants the opportunity to expand upon their answers in open-ended follow-up spaces.

Rea and Parker (2005) recommend closed-ended fixed answer questions as they fix the number of alternative responses to questions. This allows ease of data transfer and more uniform answers. Open-ended follow-up questions are, however, appropriate if the researcher seeks information not readily discernible solely from fixed answer questions.

Four of the 11 multiple choice questions that offered the response option *other*, were designed to populate response options that led to follow-up questions. *Other* responses to survey question four (SQ4) were designed to lead to response options that identified the contents of *other* as part of a matrix question in survey question five (SQ5) and a multiple choice answer in survey question six (SQ6). *Other* responses to survey question 14 (SQ14) were designed to lead to a response option that identified the contents of *other* as part of a multiple choice answer in survey question 15 (SQ15). *Other* responses to survey question 18 (SQ18) were designed to lead to response options that identified the contents of *other* as part of a matrix question in survey question 19 (SQ19)

and a multiple choice answer in survey question 20 (SQ20). *Other* responses to survey question 28 (SQ28) were designed to lead to a response option that identified the contents of *other* as part of a multiple choice answer in survey question 29 (SQ29). Section two also contained an open-ended comment box at the end of each subsection for participants to write any additional information related to their colleges' homeland security program that they felt was related.

The third section of the survey inquired about participating colleges' demographic information including: type (public, private, or military, and four-year or two-year); geographical location; student population; number of students in homeland security programs; accrediting agency; year that homeland security program was established; name, number of, and the academic background of faculty of the department that housed the colleges' homeland security program. The section also contained closed-ended, fixed-response multiple choice questions. Five of the multiple choice questions offered the response option *other (please specify)* that provided participants the opportunity to expand upon their answers in the open-ended follow-up space if more clarity was necessary. Section three also contained an open-ended comment box at the end of the survey for participants to write any additional information related to their colleges' homeland security program that they felt was related.

As this was a new survey instrument, validity and reliability had to be established prior to use on the research participants. Validity requires that the questions measure what they are purported to measure and that the participants interpret the questions as the researcher intends (Dillman et al., 2009; Fowler, 2009). Reliability requires consistency of a measure internally from one use to another. Repeated measurements of the same



thing give highly similar results (Vogt & Johnson, 2011). To aid in establishing validity and reliability of the survey instrument, an expert panel of four homeland security higher education faculty members were selected to help determine the survey's validity and reliability. The panel consisted of a convenience sample of homeland security college faculty belonging to UAPI.

To establish reliability, the panelists pre-tested the Internet-based survey to ensure that the questions were appropriate and assessed the time necessary for the research participants to complete the survey. A pre-test is a small-scale distribution of the survey to a convenience group, in this case a group of college homeland security faculty (Rea & Parker, 2005). The panelists were also asked to suggest alternative verbiage if necessary and to ensure the contents of the questions were clear. The panelists then returned the survey with written comments. The panel's responses and comments were reviewed and incorporated into a corrected survey. The panelists recommended the rewording of two questions and the addition of two categories to four questions. The corrected survey was prepared for a test distribution to the panel.

The four members of the panel were sent an email via Qualtrics containing an Internet-link to the survey. The test surveys were distributed to the panelists in the same manner as the actual research participants to simulate the actual research conditions. The panelists were asked to complete the survey and to return it electronically via Qualtrics. They were also asked to include any comments or suggestions for additional changes to the survey. The panelists completed the entire Internet-based survey electronically. The data from this test survey were analyzed and this revealed that the survey was mechanically sound. A review of the data on Qualtrics revealed that all data recorded

correctly. The survey was redistributed to the same expert panel for retest and finalization of the survey (Kelley, 1999).

### **Procedures for Data Collection and Analysis**

The fixed answer survey results were collected via Qualtrics from the research participants and were downloaded into SPSS. Demographic statistics provided the count and percentile statistics. Descriptive statistics and analysis of quantitative data were used to assess the research questions. Research participants specific responses to survey questions that provided the response option *other (please specify)* and survey questions that offered research participants the opportunity to comment were analyzed for relevancy to corresponding survey and research questions.

### **Chapter Summary**

There was little consensus about what homeland security was (Appendix A) and how college homeland security curricula should prepare students for homeland security. No common or core curriculum standard existed for homeland security higher education (Charting a Course for Homeland Security Strategic Studies Conference, 2005; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Rollins & Rowan, 2007). In order to obtain data on current homeland security higher education curricula in the U.S., an Internet-based survey was developed related to how colleges developed, categorized, and ensured that their homeland security curricula remained current as homeland security needs changed.

The researcher developed and distributed a quantitative Internet-based survey that asked college homeland security faculty to assess their colleges' homeland security curricula. Study participants were asked how their colleges developed, categorized, and

ensured that their homeland security curricula remained current. Participants were also asked to provide demographic information about their colleges including: type; student population; number of students in homeland security programs; accrediting agency; year that homeland security program was established; and the name, number of, and academic background of faculty of departments that housed colleges' homeland security programs.

The survey contained a series of questions for faculty of college homeland security faculty directly related to the research questions. Owing to the unresolved debate about the efficacy of undergraduate homeland security curricula (Bellavita, 2012; Collier, 2013; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Morton, 2012; Pelfrey & Kelley, 2013; Pelfrey et al, 2002), undergraduate and graduate homeland security curricula were analyzed separately. The research questions are as follows:

1. How do colleges develop their undergraduate homeland security curricula?
2. How do colleges categorize their undergraduate homeland security curricula?
3. How do colleges ensure that their undergraduate homeland security curricula remain current as homeland security needs change?
4. How do colleges develop their graduate homeland security curricula?
5. How do colleges categorize their graduate homeland security curricula?
6. How do colleges ensure that their graduate homeland security curricula remain current as homeland security needs change?

## Chapter 4: Results

### Research Questions

The Internet-based research survey was designed to collect data to answer the six research questions. The survey (Appendix U) consisted of questions related to how colleges developed, categorized, and ensured that their homeland security curricula remained current. The results of the survey were organized and presented in the following order: (a) screening questions, (b) demographic data of the survey population, and (c) individual survey questions as they related to specific research questions.

Owing to the unresolved debate about the efficacy of undergraduate homeland security curricula (Bellavita, 2012; Collier, 2013; Morton, 2012; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Pelfrey et al., 2002; Pelfrey & Kelley, 2013), undergraduate and graduate homeland security curricula were analyzed separately. Research questions one to three examined undergraduate homeland security curricula. Research questions four to six examined graduate homeland security curricula. The research questions are as follows:

1. How do colleges develop their undergraduate homeland security curricula?
2. How do colleges categorize their undergraduate homeland security curricula?
3. How do colleges ensure that their undergraduate homeland security curricula remain current as homeland security needs change?
4. How do colleges develop their graduate homeland security curricula?
5. How do colleges categorize their graduate homeland security curricula?

6. How do colleges ensure that their graduate homeland security curricula remain current as homeland security needs change?

The research study utilized descriptive statistics to examine factors associated with the development, categorization, and ensuring that college homeland security curricula remained current.

### **Data Analysis and Findings**

The research study assessed the validity and reliability of the survey instrument. Validity requires that the survey questions measure what they are purported to measure and that participants interpret the questions as the researcher intends (Dillman et al. 2009; Fowler, 2009; Huck, 2012). Reliability requires consistency of a measure internally from one use to another. Repeated measurements of the same thing give highly similar results (Vogt & Johnson, 2011). The survey instrument was distributed to a panel of four subject matter experts to assess its validity. The panel validated the survey instrument, i.e. determined that the survey questions measured what they purported to measure and that participants would interpret the questions as the researcher intended.

After establishing the validity of the survey instrument, the study assessed the reliability of the survey instrument using a test-retest percent agreement methodology as the number of the expert panelists,  $n=4$ , was insufficient for traditional correlation coefficients (Cohen, 2003; Maxwell, Kelley, & Rausch, 2008; Schonbrodt & Perugini, 2013). The likelihood of Type I and Type II errors when calculating correlation coefficients is directly related to the sample size of datasets. Several researchers have attempted to calculate minimum sample sizes to compute correlation coefficients with appropriate degrees of power and reliability. Cohen recommended a sample of 85,

Schonbrodt and Perugine recommended 250, and Maxwell, Kelly, and Rausch maintained that a sample of 1,000 was necessary for the calculation of meaningful and accurate coefficients.

The reported survey results of the first test (*Test-1*) completed by the four members of the panel of subject matter experts, was compared to the responses from the survey retest (*Test-2*) that the panel completed seven days later to establish test-retest reliability of the survey instrument (Litwin, 1995). Both surveys were substantially the same with only small typographical errors. The errors did not affect the meaning of the questions and were corrected for the second survey. All four panelists responded to the screening questions (SQ1-SQ3). All four panelists indicated that their colleges had an undergraduate homeland security curriculum. Accordingly, they were directed to respond to the undergraduate homeland security curricula-specific questions (SQ4-SQ17). Two of the four panelists also indicated that their colleges had a graduate homeland security curriculum. Accordingly, those two panelists were directed to respond to the graduate homeland security curricula-specific questions (SQ18-31). Survey questions that elicited comments (SQ8, SQ13, SQ17, SQ22, SQ27, and SQ31) or that contained strictly demographic data (SQ32- SQ-44) were not included in this analysis.

All four panelists of the expert panel responded to the screening questions, survey questions one through three (SQ1-SQ3). The four panelist's *Test-2* responses matched *Test-1* responses 100% for all three screening questions (SQ1-SQ3). One of the three screening questions, survey question (SQ3), was a matrix question that included two questions bringing the total number of screening questions to four. Of the total responses

16 (4 panelists: 4 questions), 16 *Test-2* responses matched *Test-1* responses (100% agreement).

All four expert panelists responded to survey questions four through 14 and survey questions 16 and 17 (SQ4-SQ14 and SQ16-SQ17). SQ8, SQ13, and SQ17 were comment questions and were not analyzed. SQ15 was not analyzed here and will be discussed below. The total number of questions analyzed for SQ4 to SQ17 was 10, of which five questions were matrix questions that contained a total of 49 questions bringing the total number of questions analyzed for SQ4 to SQ17 to 54. The four panelists' *Test-2* responses matched *Test-1* responses 100% for the following questions: SQ6-SQ11, SQ14, and SQ16. The following variances were identified and examined. Survey question four (SQ4) was a matrix question with nine questions that offered response options *yes* and *no*. Of the total 36 responses (4 panelists: 9 questions), 30 *Test-2* responses matched *Test-1* responses (83.3 % agreement). Survey question five (SQ5) was a matrix question with nine multiple choice questions. Of the total 36 responses (4 panelists: nine questions), 32 *Test-2* responses matched *Test-1* responses (88.9% agreement). Survey question 12 (SQ12) was a matrix question with 21 questions that offered response options *yes* and *no*. Of the total 84 responses (4 panelists: 21 questions), 81 *Test-2* responses matched *Test-1* responses (96.4% agreement). Of the total responses analyzed for SQ4 to SQ17, 216 responses (4 panelists: 54 questions): 203 *Test-2* responses matched *Test-1* responses (94% agreement).

The two panelists that indicated that their colleges also had graduate level homeland security curricula were directed to respond to survey question 18 to 28 and survey questions 30 and 31 (SQ18-SQ28 and SQ30, SQ31). SQ22, SQ27, and SQ31

were comment questions and were not analyzed. SQ29 was not analyzed here and will be discussed below. The total number of questions analyzed for SQ18 to SQ31 was 10 of which five questions were matrix questions that contained a total of 49 questions bringing the total number of questions analyzed for SQ18 to SQ31 to 54. The panelists' *Test-2* responses matched *Test-1* responses 100% for the following questions: SQ19, SQ21, SQ24, SQ25, SQ28, and SQ30. The following variances were identified and examined. Survey question 18 (SQ18) was a matrix question with nine questions that offered response options *yes* and *no*. Of the total 18 responses (2 panelists: 9 questions), 16 *Test-2* responses matched *Test-1* responses (88.9% agreement). Survey question 20 (SQ20) was a multiple choice question. Of the total two responses (2 panelists: 1 question), one *Test-2* response matched *Test-1* responses (50% agreement). The panelist that changed his response to SQ20 reported that his *Test-1* response was an oversight. The *Test-1* response and the test-retest variance were attributed to human error. Survey question 23 (SQ23) was a multiple choice question. Of the total two responses (2 panelists: 1 question), one *Test-2* response matched *Test-1* responses (50% agreement). The panelist that changed his response to SQ23 reported that he completed *Test-1* on a tabular computer that he was not familiar with and that his *Test-1* response to SQ23 was not intended. The panelist's response to *Test-1* and the test-retest variance were attributed to technical error. Survey question 26 (SQ26) was a matrix question with 21 questions that offered response options *yes* and *no*. Of the total 42 responses (2 panelists: 21 questions), 39 *Test-2* responses matched *Test-1* responses (92.8% agreement). Of the total responses for SQ18 to SQ30, 108 responses (2 panelists: 54 questions): 101 *Test-2* responses matched *Test-1* responses (93.5% agreement).



Subsequent to the test-retest analysis, the researcher determined that two additional survey questions were necessary to answer research questions three (RQ3) and six (RQ6) respectively. The following two questions were developed and incorporated into the survey instrument: survey question 15 (SQ15) *Which of the following was the most important factor in how your college kept its undergraduate curriculum current?* and survey question 29 (SQ29) *Which of the following was the most important factor in how your college kept its graduate curriculum current?* Survey question 15 (SQ15) was a multiple choice question that was predicated on respondents' responses to survey question 14 (SQ14). Survey question 29 (SQ29) was a multiple choice question that was predicated on respondents' responses to survey question 28 (SQ28). The researcher submitted survey questions 15 and 29 to the panel of experts for examination. The panel of experts determined that the two questions (SQ15 and SQ29) were valid, i.e. the questions measured what the researcher intended. Due to the expert panels' familiarity with SQ15 and SQ29, test-retest analysis was determined not to be necessary. In the aggregate, the expert panel responded to a total of 112 questions of which 320 out of 340 *Test-1* responses matched *Test-2* responses (94% agreement). The analysis supported the reliability of the survey instrument. The final survey instrument was renumbered to reflect the addition of SQ15 and SQ19. The test-retest survey question numbers above reflect the final survey question numbers.

SPSS was used to code and tabulate scores collected from the survey and provide summarized values where applicable. Demographic statistics provided count and percent statistics. Descriptive statistics and analysis of quantitative data were used to answer the research questions.

**Screening questions.** Three survey questions (SQ1-SQ3) were used to describe: survey participants' positions at their colleges; survey participants' levels of involvement in the development, categorization, and ensuring that their colleges' homeland security curricula remained current; and the levels of homeland security curricula that survey participants' colleges offered.

Survey question one (SQ1) and survey question two (SQ2) were also used to remove survey participants that did not meet all research study criteria from the analysis. Survey participants who indicated that they were *other* than full-time or part-time faculty (SQ1) or were *not at all involved* in the development, categorization, and keeping their colleges' homeland security curricula current (SQ2) were directed to the end of the survey and not included in further analysis. Survey question three (SQ3) was also used to determine survey participants' suitability for questions that pertained exclusively to undergraduate or graduate homeland security curricula. Participants that reported that their colleges offered undergraduate or graduate curricula were directed to undergraduate or graduate specific sections respectively. Participants that reported that their colleges offered both undergraduate and graduate homeland security curricula were directed to both the undergraduate and graduate specific sections.

The population consisted of 587 college faculty members that teach homeland security at a U.S. college that offered homeland security curricula and were registered UAPI members. The Internet-based survey was administered to the entire population that resulted in a preliminary voluntary return rate of  $n=102$  (17.4%). That is, 102 faculty members, as identified by UAPI (Center for Homeland Defense and Security, 2014c), responded to the survey. However, as UAPI's 1,200 plus members self-identified their

professional credentials and particularly their faculty status, the survey was designed to filter out UAPI members that were mistakenly identified as college faculty. Specifically,  $n=10$  (9.8%) of the survey participants were identified as not meeting the college faculty requirement. They were directed to the end of the survey and removed from further analysis. Survey question two (SQ2) asked participants to describe their involvement in the development, categorization, and ensuring that their colleges' homeland security curricula remained current. Response options included *very involved*, *somewhat involved*, *not too involved*, and *not at all involved*. Six (5.8 %) survey participants identified themselves as either *not too involved* or *not at all involved* in the development, categorization, and ensuring that their colleges' homeland security curricula remained current. It was determined that they did not merit inclusion in the study and were not included in further analysis. The final sample population was  $n=86$  participants. Table 4.1 features research participants' faculty positions and levels of involvement in the development, categorization, and ensuring that their colleges' curricula remained current.

Table 4.1

*Participants' Positions and Level of Involvement*

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Frequency Statistics for Research Participants' Positions at their Colleges and Level of Involvement in the Development, Categorization, and Ensuring that their Colleges' Homeland Security Curricula Remained Current

Level of Involvement	Full-Time Faculty		Part-Time Faculty		Total Faculty	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Very Involved	60	89.6	12	63.2	72	83.7
Somewhat involved	7	10.4	7	36.8	14	16.3
Total	67	88.0	19	100.0	86	100.0

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*Note.*  $n = 86$

The sample population from UAPI included participants whose colleges offered undergraduate/graduate homeland security curricula. Specifically,  $n=60$  (69.8%) participants reported that their colleges offered undergraduate curricula;  $n=52$  (60.5%) participants reported that their colleges offered graduate homeland security curricula; and  $n=26$  (30.2%) participants reported their colleges offered both undergraduate and graduate homeland security curricula. Levels of colleges' homeland security curricula are depicted in Table 4.2.

Table 4.2

*Frequency Statistics for Levels of College Homeland Security Curricula*

Curricula Level	<i>n</i>	%
Undergraduate	60	69.8
Graduate	52	60.5
Undergraduate and Graduate	26	30.2

*Note.*  $n = 86$

**Demographics.** The population consisted of 587 faculty members from colleges in the U.S. that offered undergraduate/graduate homeland security curricula. The Internet-based survey was administered to the entire population and that resulted in a voluntary return rate of  $n=86$  (14.6%). That is, 86 faculty members from colleges in the U.S. that offered undergraduate/graduate homeland security curricula responded to the survey and, as was discussed in the preceding screening questions section, were determined to be faculty members from colleges that offered homeland security curricula that were, at a minimum, somewhat involved in the development, categorization, and ensuring that their colleges' homeland security curricula remained current.

All  $n=86$  research participants were affiliated with at least one of 293 colleges identified by UAPI (Center for Homeland Defense and Security, 2014d) as having a homeland security program. The number of colleges  $n=293$  reflects the UAPI database as of March 1, 2014. Specifically,  $n=35$  (40.7%) colleges were four-year private institutions,  $n=30$  (34.9%) four year public schools,  $n=12$  (14%) two-year public or private institutions, and  $n=9$  (10.5%) military institutions. Table 4.3 depicts college types.

Table 4.3

*Frequency Statistics for College Type*

College Type	$n$	%
Four-year private college	35	40.7
Four-year public college	30	34.9
Two-year public or private college	12	14.0
Military	9	10.5

*Note.*  $n = 86$

Research participants' colleges were regionally located in the U.S., as identified by the U.S. Census Bureau (2000). Three of the four responses indicated a U.S. state and one respondent indicated "World Wide teaching sites." The three responses that indicated a U.S. state were attributed to their respective region and recoded accordingly. The colleges were dispersed throughout the nation with the largest percentages residing in the Northeast–Mid–Atlantic 25.6% ( $n=22$ ) and South–South Atlantic 17.4% ( $n=15$ ). Table 4.4 depicts colleges' regional locations.

Table 4.4

*Frequency Statistics for Colleges Regional Location*

College Location	<i>n</i>	%
Northeast–New England (ME, NH, VT, MA, RI, CT)	4	4.7
Northeast–Mid-Atlantic (NY, PA, NJ)	22	25.6
Midwest–East North Central (WI, MI, IL, IN OH)	8	9.3
Midwest–West North Central (MI, ND, SD, NE., KA, MN, IA)	5	5.8
South–South Atlantic (DE, MD, DC, VA, WV, NC, SC, GA., FL)	15	17.4
South–East South Central (KY, TN, MS, AL)	4	4.7
South–West South Central (OK, TX, AR, LA)	12	14.0
West–Mountain (ID, MT, WY, NV, UT, CO, AR, NM)	4	4.7
West–Pacific (AL, WA, OR, CA, HI)	11	12.8
<i>Other</i>	1	1.2

*Note.* *n* = 86

As depicted in Table 4.5, *n*=80 (93%) of the research participants' colleges were accredited by one of the six U.S. Department of Education (2014) recognized regional accreditors. Three colleges identified as *other*, one of which was reported as a subdivision of U.S. Department of Education recognized accrediting agency and was recoded as such. The remaining two *others* were recoded as not accredited by a Department of Education recognized regional accreditor. Colleges' national accrediting agencies are depicted in Table 4.5.

Table 4.5

*Frequency Statistics for National Accrediting Agencies*

Accrediting Agency	<i>n</i>	%
Middle States Association of Colleges and Schools	26	30.2
New England Association of Colleges	2	2.3
Northwest Commission on Colleges and Universities	2	2.3
North Central Association of Colleges and School	21	24.4
Southern Association of Schools and Colleges	19	22.1
Western Association of Schools and Colleges	10	11.6
Not Accredited	6	7.0

*Note.* *n* = 86

Research participants' colleges included institutions of various sizes of student populations ranging from less than 1,000 to more than 10,000. The majority of colleges *n*=58 (65.9%) had student populations of more than 5,000. College student populations are depicted in Table 4.6.

Table 4.6

*Frequency Statistics for Number of Students*

Number of students	<i>n</i>	%
Less than 1,000 students	9	10.5
1001-5000 students	20	23.3
5001-10,000 students	21	24.4
More than 10,000 students	36	41.9

*Note.* *n* = 86

Research participants' colleges enrolled various numbers of students in homeland security programs at both the undergraduate and graduate levels ranging from 1-50 to more than 100 with most colleges having homeland security student bodies of more than 100 at both the *n*=25 (41%) undergraduate and *n*=19 (36.6%) graduate levels. The numbers of students enrolled in homeland security programs are depicted in Table 4.7.

Table 4.7

*Students Enrolled in Homeland Security Curricula*

Number of Students	Undergraduate		Graduate	
	<i>n</i>	%	<i>n</i>	%
1-50	20	33.3	19	36.6
51-100	15	25.0	14	26.9
More than 100	25	41.0	19	36.6

*Note.* Undergraduate *n* = 60; Graduate *n* = 52



Research participants reported that their colleges established their homeland security programs in varying years ranging from prior to 2002 to 2014. The years that colleges established their homeland security programs are depicted in Table 4.8.

Table 4.8

*Year Colleges Established Their Homeland Security Programs*

Frequency Statistics for Year that Colleges Established Their Homeland Security Programs		
Year	<i>n</i>	%
Prior to 2002	5	5.8
2002	3	3.5
2003	6	7.0
2004	8	9.3
2005	3	3.5
2006	7	8.1
2007	9	10.5
2008	4	4.7
2009	4	4.7
2010	11	12.8
2011	5	5.8
2012	4	4.7
2013	12	14.0
2014	5	5.8

*Note.* *n* = 86; 2014 numbers are as of March 1, 2014

Research participants reported that the departments that housed their colleges' homeland security programs were named differently with the largest percentages specified as 26.7% ( $n=23$ ) Criminal Justice, 11.6% ( $n=10$ ) Homeland Security, 8.1% ( $n=7$ ) Public Administration and 4.7% ( $n=4$ ) for each of the following: Emergency Management, Intelligence, and National Security Affairs. Interestingly, 36% ( $n=31$ ) of participants reported that the departments that housed their colleges' homeland security programs bore other names including: business, health, and science; legal, interagency and multinational operations; engineering; global health; international rescue and relief; security studies; social science and human services; sociology; and anthropology. Table 4.9 depicts the names of departments that housed colleges' homeland security programs.

Table 4.9

*Names of Departments that offer Homeland Security Programs*

Frequency Statistics for Names of Departments that offer Homeland Security Programs		
Department Name	<i>n</i>	%
Criminal Justice	23	26.7
Homeland Security	10	11.6
Public Administration/ Public Policy	7	8.1
Emergency Management	4	4.7
Intelligence	4	4.7
National Security / International Affairs	4	4.7
Fire Science	2	2.3
Cyber Security/IT	1	1.1
<i>Other</i>	31	36.0

*Note.*  $n = 86$

Faculty academic background was reported as all academic backgrounds of faculty from departments that housed colleges' homeland security programs and the academic background that best described departments' faculty. Survey question 42 (SQ42) permitted participants to choose multiple answers to best convey the academic backgrounds of faculties from departments that housed their colleges' homeland security programs. Survey question 43 (SQ43) asked participants to specify which if any academic background best described the department that housed their colleges' homeland security programs.

Faculty from departments that housed colleges' homeland security programs had varied academic backgrounds. The majority (68% or higher) of research participants reported that the departments that housed their colleges' homeland security programs had some faculty with academic backgrounds that included: 88.6% ( $n=78$ ) criminal justice, 83% ( $n=73$ ) homeland security, 80.7% ( $n=71$ ) emergency management, 75% ( $n=66$ ) intelligence, 72.7% ( $n=64$ ) public administration/policy, and 68.2% ( $n=60$ ) national security affairs/international affairs. In addition, 29.5% ( $n=26$ ) reported *other* academic backgrounds including: agricultural biology, food defense, anthropology, architecture, aviation, business, civil rights, criminology, customs intelligence, economics, education, engineering, geospatial intelligence, history, international relations, instructional systems- leadership, workforce development, journalism, law, medical, military science, national security, nursing, political science, psychology, and social work.

Research participants further reported that various academic backgrounds best described the academic background of the departments that housed their colleges' homeland security programs with the largest percentage 30.2% ( $n=26$ ) reporting that

their faculty’s academic background was best described as “mixed to the extent that no one academic background represented a majority,” followed by 26.7% ( $n=23$ ) Criminal Justice, 15.1% ( $n=13$ ) Homeland Security, and 7% ( $n=6$ ) Emergency Management. In addition, 5.8% ( $n=5$ ) participants responded *other* and specified the following as the best description of the academic background of the department: computer and cyber, engineering, geospatial intelligence, and law.

Research participants reported that the number of full-time and part-time faculty assigned to the departments that housed their colleges’ homeland security programs varied ranging from 1-5 to 16 or more for both full-time and part-time faculty. Table 4.10 depicts the numbers of full-time and part-time faculty assigned to the departments that housed colleges’ homeland security programs. Table 4.11 depicts the academic background of departments that housed colleges’ homeland security programs.

Table 4.10

*Frequency Statistics for Number of Department Faculty*

Faculty Size	Full-Time Faculty		Part-Time Faculty	
	<i>n</i>	%	<i>n</i>	%
1-5	39	45.3	23	26.7
6-10	27	31.4	20	23.3
11-15	9	10.5	18	20.9
16 +	11	12.8	25	29.1

*Note.*  $n = 86$  for both full and part time faculty

Table 4.11

*Frequency Statistics for Department Faculty's Academic Background*

Academic Background	Best Description of Department Faculty		Some Members of Department Faculty	
	<i>n</i>	%	<i>n</i>	%
Criminal Justice	23	26.7	76	88.4
Homeland Security	13	15.1	72	83.7
Emergency Management	6	7.0	69	80.2
Intelligence	5	5.8	66	76.7
Public Administration/ Public Policy	3	3.5	64	74.4
National Security Affairs/ International Affairs	3	3.5	60	69.8
Cyber Security/ Information Technology	1	1.2	57	66.3
Emergency Medical Services	0	0	37	43.0
Fire Science	1	1.2	37	43.0
Public Health	0	0	36	41.9
<i>Other</i>	5	5.8	25	29.1
Mixed to the extent that no one academic background represents a majority	26	30.2	N/A	

*Note.* *n* = 86

**Undergraduate homeland security research questions.** Research questions one through three (RQ1-RQ3) examined undergraduate homeland security curricula.

**Research question one.** The following data analysis was related to Research Question One (RQ1): *How do colleges develop their undergraduate homeland security curricula?* Survey question four (SQ4) asked participants to report the means that their colleges used to develop their undergraduate homeland security curricula. The question permitted participants to choose multiple answers to best convey the means their colleges used to develop their undergraduate homeland security curricula. Survey question six (SQ6) asked participants to choose the means that *most influenced* the development of their colleges' undergraduate homeland security curricula.

Research participants reported that their colleges used multiple and varied means to develop their undergraduate homeland security curricula, 38% or higher of research participants' colleges employed focus groups/advisory councils and accreditation/agency processes and adopted preexisting department, DHS, CHDS, and UAPI (other than CHDS) course materials. The majority (63.3%,  $n=38$ ) reported that their colleges employed a focus group/advisory council process. Near majorities adopted pre-existing course materials (46.7%,  $n=28$ ), DHS course materials (46.7%,  $n=28$ ), UAPI (other than CHDS) course materials (45%,  $n=27$ ), and CHDS course materials (43.3%,  $n=26$ ).

In addition, 21.7% ( $n=13$ ) of colleges used *other* means including: considered course offerings at other institutions (including graduate level courses); developed their program from scratch based on interviews with Customs and Border Patrol and Immigration and Customs Enforcement officials; consulted external subject matter experts; adapted Fire and Emergency Services Higher Education course materials; used FEMA certifications as supplements; based program on DHS and Center for Disease

Control competencies and objectives; and used the CHDS “Undergraduate Curriculum: Recommended Areas of Focus” and meetings with stakeholders.

Research participants further reported that various means *most influenced* the development of their colleges’ undergraduate homeland security curricula with the largest percentages reporting that 25% ( $n=15$ ) focus groups/advisory councils, 16.7% ( $n=10$ ) preexisting department course materials, and 10% ( $n=6$ ) CHDS course materials most influenced the development of their colleges’ undergraduate homeland security curricula. Table 4.12 depicts the means and the means that most influenced the development of colleges’ undergraduate homeland security curricula.

To analyze the importance of each of the means that research participants’ colleges used to develop their undergraduate homeland security curricula, participants were asked to rate the importance of each of the means that their college used in the development of the curricula. Response options included *very important*, *somewhat important*, *not too important*, and *not at all important*. Focus group/advisory councils (38.3%,  $n=23$ ), DHS course materials (25%,  $n=15$ ), and CHDS and preexisting department course materials each at 23.3% ( $n=14$ ) represented the means that were most rated as *very important* in the development of the curricula.

Table 4.13 depicts the means used to develop undergraduate homeland security curricula and their relative importance.

Table 4.12

*Frequency Statistics for Survey Question 4 & 6*


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How did your college develop its undergraduate homeland security curriculum?

Which of the following most influenced the development of your college's undergraduate homeland security curricula?

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Response Options	How Developed		Most Influenced	
	<i>n</i>	%	<i>n</i>	%
Adopted/modified CHDS course materials	26	43.3	6	10.0
Adopted/modified UAPI course materials (Other than CHDS)	27	45.0	5	8.3
Adopted/modified DHS course materials	28	46.7	7	11.7
Adopted/modified DOD course materials	13	21.7	3	5.0
Adopted/modified pre-existing department course materials	28	46.7	10	16.7
Adopted/modified course materials from other departments	23	38.3	1	1.7
Employed focus/advisory group	38	63.3	15	25.0
Employed accreditation/agency process	23	38.3	1	1.7
<i>Other</i>	13	21.7	9	15.0

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*Note.* How Developed *n* = 60; Most Influenced *n* = 57, 3 research participants responded *no* to all SQ4 matrix questions and were excluded from SQ6's analysis. All percentages reflect *n*=60



Table 4.13

*Frequency Statistics for Survey Question 5*

How important were each of the following in the development of colleges undergraduate homeland security curriculum?

Response Options	Very Important		Somewhat Important		Not too Important	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
CHDS course materials ( <i>n</i> =26)	14	53.8	11	42.3	1	3.8
UAPI course materials (other than CHDS) ( <i>n</i> =27)	13	48.1	13	48.1	1	3.7
DHS course materials ( <i>n</i> =28)	15	53.6	13	46.4	0	—
DOD course materials ( <i>n</i> =13)	6	46.2	6	46.2	1	7.7
Pre-existing department course materials ( <i>n</i> =28)	14	50.0	11	39.3	3	10.7
Course materials from other departments ( <i>n</i> =23)	7	30.4	13	56.5	3	5.3
Employed focus/advisory Group ( <i>n</i> =38)	23	60.5	12	31.6	2	5.3
Employed accreditation/agency process ( <i>n</i> =23)	12	52.2	5	21.7	6	26.1
<i>Other</i> ( <i>n</i> =13)	9	69.2	3	23.1	1	7.7

*Note.* Each response option *n* was predicated on the number of participants that selected corresponding responses to SQ4. The table does not reflect one participant that reported that focus/advisory councils were *not at all important*.

As shown in Table 4.14, research participants reported that their colleges offered their undergraduate homeland security curricula through various program-delivery modes with 80% ( $n=48$ ) delivering at least part of their program on-line: 36.7% ( $n=22$ ) using a mixture of traditional, on-line, and blended platforms; 25% ( $n=15$ ) using on-line platforms; and 18.3% ( $n=11$ ) using blended platforms. College undergraduate homeland security curricula program delivery modes are depicted in Table 4.14.

Table 4.14

*Frequency Statistics for Survey Question 7*

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Which of the following best describes the program delivery of your college's undergraduate homeland security curriculum?

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Response Options	<i>n</i>	%
Traditional	12	20.0
On-Line	15	25.0
Blended (Hybrid, Traditional Classroom and on-line)	11	18.3
Mixture of traditional, On-line, and blended	22	36.7

---

*Note.*  $n = 60$

Survey question eight (SQ8) offered participants the opportunity to add any comments regarding the development of their colleges' undergraduate homeland security curricula that were not covered in the study. Participants comments included: breadth and challenges inherent to homeland security made choosing what to include and what to exclude difficult; faculty was most important; faculty had practitioner experience; courses were developed in partnership with a learning management system; courses were

solicited from FEMA; curricula emerged from Transportation Security Administration course outlines blended with pre-existing criminal justices courses in terrorism; student surveys reported preference for hybrid courses; senior administrators determined course offerings and program delivery; minors, concentrations, and certifications grew into homeland security majors; and developed courses based on graduate thesis from the Naval Post Graduate School. Research participants specified responses to SQ8 such as interviewing/meeting with FEMA, Customs and Border Patrol, Immigration and Customs Enforcement officials, subject matter experts, and stakeholders likely represents an increase in the role that focus groups/advisory councils played in the development of colleges undergraduate homeland security curricula.

**Research question two.** The following data analysis was related to Research Question Two (RQ2): *How do colleges categorize their undergraduate homeland security curricula?* Research participants were asked to rate both the importance of the department that housed their colleges' undergraduate homeland security curricula and their colleges' administration in determining the categorization of the curricula. The vast majority of participants, 68.3% ( $n=41$ ), reported that the departments that housed their colleges' undergraduate homeland security curricula were very important compared to 21.7% ( $n=13$ ) that reported that their colleges' administration was very important.

The importance of departments that housed college undergraduate homeland security curricula and college administrations in determining how undergraduate homeland security curricula were categorized are depicted in Table 4.15.

Table 4.15

*Frequency Statistics for Survey Question 10*


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How important were each of the following in determining the categorization of your college's undergraduate homeland security curriculum?

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Response Options	College Department		College Administration	
	<i>n</i>	%	<i>n</i>	%
Very important	41	68.3	13	21.7
Somewhat important	15	25.0	24	40.0
Not too important	3	5.0	18	30.0
Not at all important	1	1.7	5	8.3

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*Note.* *n* = 60

Research participants were asked to best describe how their colleges categorized (labeled) their undergraduate homeland security curricula. As shown in Table 4.16, colleges categorized their undergraduate homeland security curricula using various labels. The vast majority of research participants, 71.7% (*n*=43) reported that their colleges categorized their undergraduate homeland security curricula as either 28.3% (*n*=17) Homeland Security and Emergency Management, 21.7% (*n*=13) Homeland Security and Criminal Justice, or 21.7% (*n*=13) Homeland Security.

In addition, 11.7% (*n*=7) participants reported that their colleges categorized their undergraduate homeland security curricula as Homeland Security and *Other* with specified responses ranging from Security Studies (with Border Security) and Homeland

Defense to Cyber Security and Corporate Security. How colleges categorized their undergraduate homeland security are depicted in Table 4.16.

Table 4.16

*Frequency Statistics for Survey Question 9*

Which of the following best describes how your college categorized (labeled) its undergraduate homeland security curriculum?

Category	<i>n</i>	%
Homeland Security and Emergency Management	17	28.3
Homeland Security and Criminal Justice	13	21.7
Homeland Security	13	21.7
Homeland Security and Cyber Security/Information Technology	2	3.3
Homeland Security and Intelligence	4	6.7
Homeland Security and Fire Science	2	3.3
Homeland Security and Emergency Medical Services	1	1.7
Homeland Security and National Security Affairs/ International Security Affairs	1	1.7
Homeland Security and Other	7	11.7

*Note.* *n* = 60

Cumulatively, (a) the percentage (21.7%, *n*=13) of participants that reported that their colleges' undergraduate homeland security curricula was best described as Homeland Security per se; (b) the percentage (10%, *n*=6) of college academic

departments that housed undergraduate homeland security curricula that were best described by research participants as Homeland Security per se; and (c) the percentage (13.3%,  $n=8$ ) of faculty whose academic background was best described by research participants as Homeland Security per se suggests that homeland security is evolving as an academic discipline. The cumulative findings align with the research that suggests the emergence of homeland security as a new, emerging, and developing discipline (Center for Homeland Defense and Security, 2008, 2011a; Falkow, 2013; Palin, 2010; Recca, 2013; Supinski, 2012).

Survey question 11 (SQ11) asked participants to identify the disciplinary approach to their colleges' undergraduate homeland security curricula. The vast majority (81.7%,  $n=49$ ) of participants reported that their colleges' approach to their undergraduate homeland security curricula was either 43.3% ( $n=26$ ) multidisciplinary or 38.3% ( $n=23$ ) interdisciplinary rather than *unidisciplinary*. Unidisciplinary is a disciplinary approach in which members of a single discipline work together to address a common problem (Stokols et al., 2008). This aligns with the research that suggested that homeland security as field of study or an academic discipline was, or should be multidisciplinary/interdisciplinary (Bellavita & Gordon, 2006; California State University, Council for Emergency Management and Homeland Security, 2012; Charting a Course for Homeland Security Strategic Studies Conference, 2005; Clement, 2011; Falkow, 2013; Kiltz, 2011; Loudon, 2007; McCreight, 2014; National Research Council Committee on Education Paradigms for Homeland Security, 2005; Pelfrey & Kelley, 2013; Polson, Persyn, & Cupp, 2010; Ramsay, Cutrer, & Raffel, 2010; Renda-Tanali,

2012; Rollins & Rowan, 2007; Smith, 2005; Supinski, 2012). Table 4.17 depicts colleges' undergraduate homeland security disciplinary approaches.

Table 4.17

*Frequency Statistics for Survey Question 11*

Which of the following best describes your college's undergraduate homeland security curricula?		
Response option	<i>n</i>	%
Single Discipline (curriculum focus is on a single discipline)	11	18.3
Multidisciplinary (curriculum includes multiple perspectives)	26	43.3
Interdisciplinary (curriculum integrates multiple perspectives and disciplines)	23	38.3

*Note.* *n* = 60

Survey question 12 (SQ12) asked participants to report topics that their colleges' undergraduate homeland security curricula included. The question permitted respondents to choose multiple answers to best convey the topics that their colleges' undergraduate homeland security curricula included. All participants (*n*=60, 100%) reported that their colleges' undergraduate curricula included terrorism, followed by vast majorities that reported that their colleges undergraduate curricula included critical thinking (*n*=59, 98.3%), intelligence (*n*=57, 95%), collaboration (*n*=56, 93.3%), and strategy, all-hazards, and critical infrastructure each at *n*=55 (91.7%). Moreover, *n*=11 (18.3%) participants reported that their colleges offered or were considering offering *other* topics including: cultural compliance, ethics, maritime security, transnational criminal organizations, military science, personal and family preparedness, public and private partnership, and writing and research analysis.

The large number of topics that were included in colleges' undergraduate homeland security curricula mirrors the research that revealed the range and vastness of homeland security as a field, field of study, or discipline (Bellavita, 2014; Bellavita & Gordon, 2006; Charting a Course for Homeland Security Strategic Studies Conference, 2005; Falkow, 2013; McCreight, 2014; National Research Council's Committee on Educational Paradigms, 2005; Ramsay, 2013; Reese, 2013, 2014; Rollins & Rowan, 2007; U.S. Department of Homeland Security, 2014b). The topics that colleges included in their undergraduate homeland security are depicted in Table 4.18.

Survey question 13 (SQ13) offered research participants the opportunity to add any comments regarding the categorization of their colleges' undergraduate homeland security curricula that they felt were not covered in the survey. Thirteen (21.7%) participants added comments that included: adopted homeland security and emergency management courses because both were critical to students' employment; included prerequisite critical thinking course; homeland security curriculum could be taken as part of a criminal justice program or as a stand-alone program; homeland security was open to all majors; homeland security was a minor in a new criminal justice program, but was growing to the extent that homeland security might expand into a new major; undergraduate program was an intelligence program; program was designed for students seeking careers in community service in times of humanitarian need. The curriculum provided graduates with the knowledge, skills, and abilities for professional certification in emergency response and management and a variety of career opportunities; curriculum transformed from criminal justice-centric program into a multidisciplinary curriculum; college offered four areas of concentration: organizational security, emergency



management, intelligence; and national security; and public safety major would be an umbrella major or minor in emergency management, fire service, and homeland security.

Table 4.18

*Frequency Statistics for Survey Question 12*

Does your college's undergraduate homeland security curriculum include the following topics?		
Response Option	<i>n</i>	%
Terrorism	60	100
Critical Thinking	59	98.3
Collaboration	56	93.3
Intelligence	57	95.0
Strategy	55	91.7
All-hazards	55	91.7
Critical Infrastructure	55	91.7
Emergency Management	52	86.7
Preparedness	53	88.3
Risk Management	53	88.3
Cyber Security/IT	51	85.0
Law	51	85.0
Public Administration/Policy	46	76.7
Resilience	45	75.0
National Security Affairs/International Affairs	44	73.3
Immigration	33	55.0
Mapping (GIS)	31	51.7
Public Health	31	51.7
Emergency Medical Services	24	40.0
Fire Science	18	30.0
<i>Other</i>	11	18.3

*Note.* *n* = 60

**Research question three.** The following data analysis was related to Research Question Three (RQ3): *How do colleges ensure that their undergraduate homeland security curricula remain current as homeland security needs change?* Survey question 14 (SQ14) permitted participants to choose multiple answers to best convey the means that their colleges used to ensure that their undergraduate homeland security curricula remained current. Survey question 15 (SQ15) asked participants to identify the means that was most important in keeping their colleges undergraduate homeland security curricula current.

Research participants' colleges used multiple and varied means to ensure that their undergraduate homeland security curricula remained current with the vast majority reporting that their colleges: 95% ( $n=57$ ) reviewed current homeland security academic literature and current government homeland security policy directives; 91.7% ( $n=55$ ) solicited student input/feedback; 85% ( $n=51$ ) reviewed the UAPI website for new and updated course material, 80% ( $n=48$ ) conducted independent research, and 80% ( $n=48$ ) attended national homeland security conferences. The majority 61.7 % ( $n=38$ ) convened focused groups/advisory councils, and 13.3% ( $n=8$ ) employed *other* means ranging from sought advice from expert faculty that worked in the field and employee feedback to required course revision cycle and faculty reviewed sub-discipline literature such as cybersecurity.

Research participants also reported that various methods were the *most important* means that their colleges used to ensure that their undergraduate homeland security curricula remained current, with the largest percentages (28.3%,  $n=17$ ) reporting that faculty reviewed current government homeland security policy directives and strategies,

followed by 21.7% ( $n=13$ ) reporting that faculty reviewed current homeland security literature, and 15% ( $n=9$ ) reporting that faculty convened focus groups/advisory councils.

Table 4.19 indicates how colleges ensured that their undergraduate curricula remained current and which means were *most important*.

Table 4.19

*Frequency Statistics for Survey Question 14 & 15*

How does your college keep its undergraduate homeland security curriculum current?

Which of the following was the most important factor in how your college kept its undergraduate homeland security curriculum current?

Response options	Means used		Most Important	
	<i>n</i>	%	<i>n</i>	%
Faculty review current homeland security academic literature	57	95.0	13	21.7
Faculty review current government homeland security policy directives and strategies	57	95.0	17	28.3
Faculty solicits student input/feedback	55	91.7	1	1.7
Faculty review UAPI website for new and updated course material	51	85.0	4	6.7
Faculty conducts independent research	48	80.0	5	8.3
Faculty attends national security conferences	48	80.0	8	13.3
Faculty convenes focus group/advisory councils	37	61.7	9	15.0
Other	8	13.3	2	3.3

*Notes.*  $n = 60$ . *Most Important Means Used:*  $n = 59$ . One respondent answered no to all SQ14 response options and was not eligible to respond to SQ15. All percentages reflect  $n=60$

Survey question 16 (SQ16) asked participants how much their colleges' undergraduate homeland security curricula changed since they were first offered.

Response options included: *a lot, somewhat, just a little, and none*. The vast majority 80% ( $n=48$ ) participants reported that their colleges' undergraduate homeland security curricula had changed at least somewhat with 31.7% ( $n=19$ ) reporting that their colleges undergraduate homeland security curricula had changed a lot and 48.3% ( $n=29$ ) reporting that the curricula had changed somewhat. This mirrored the research that suggested that homeland security was an evolving field, field of study, or discipline (Bellavita, 2014; Bellavita & Gordon, 2006; Charting a Course for Homeland Security Strategic Studies Conference, 2005; Falkow, 2013; McCreight, 2014; National Research Council's Committee on Educational Paradigms, 2005; Ramsay, 2013; Reese, 2013, 2014; Rollins & Rowan, 2007; U.S. Department of Homeland Security, 2014b). The varying degrees that participants' colleges' undergraduate homeland security curricula changed are presented in Table 4.20.

Table 4.20

*Frequency Statistics for Survey Question 16*

Since your college first offered its undergraduate homeland security curriculum, how much has the curriculum been modified?		
Response options	<i>n</i>	%
A lot	19	31.7
Somewhat	29	48.3
Just a little	7	11.7
None	5	8.3

*Note.*  $n = 60$

Survey question 17 (SQ17) offered participants the opportunity to add any comments relevant to how their colleges kept their undergraduate curricula current that were not covered in the survey that might be relevant to the study. Eleven participants

added comments including: there was no single factor. Each course had an “owner” who solicited input to keep materials up-to-date. Information sources were anything we could get access to and input from advisors; courses were reviewed every three years and critical items might be changed immediately; program was being reviewed at end of third year cycle to meet formatting and accreditation requirements and to incorporate better texts; CHDS workshops were helpful; wished that more national conferences were available to incorporate recent terrorist cases; constant updating of pedagogy, texts, and professional development; new program still in development; faculty expected to keep current; each course reviewed annually; our program began in one department and is now interdisciplinary and needs the involvement of more departments and college appears stagnant now that 9/11 is long past; just completed major review after seven years; current program was criminal justice with emphasis on homeland security and new program will be called homeland security with no criminal justice courses except electives; adding on-site courses at airport by request of Transportation Security Administration beyond Certification of Completion including emergency management courses; and focus on employer certifications.

**Graduate homeland security research questions.** Research questions four through six (RQ4-RQ6) examined graduate homeland security curricula.

***Research question four.*** The following data analysis was related to Research Question Four (RQ4): *How do colleges develop their graduate homeland security curricula?* Survey question eighteen (SQ18) asked participants to report the means that their colleges used to develop their graduate homeland security curricula. The question permitted participants to choose multiple answers to best convey the means their colleges

used to develop their graduate homeland security curricula. Survey question twenty (SQ20) asked participants to choose the means that was most important in the development of their colleges' graduate homeland security curricula.

Research participants reported that their colleges used multiple and varied means to develop their undergraduate homeland security curricula. The majority of research participants, 61.5% ( $n=32$ ) reported that their colleges employed a focus group/advisory council process, 59.6% ( $n=31$ ) adopted/modified CHDS course materials, and 50% ( $n=26$ ) adopted/modified preexisting department course materials. Near majorities of colleges, 46.2% ( $n=24$ ) employed accreditation/agency processes and 44.2% ( $n=23$ ) adopted/modified UAPI (other than CHDS) course materials. In addition, 21.2% ( $n=11$ ) colleges used *other* means to develop their graduate homeland security curricula including: employing subject matter experts and ad hoc committees and consulted Customs and Border Control and Immigration and Customs Enforcement officials; workshops with State homeland security agency; and input from the department of education (state-level).

Research participants reported that various means *most influenced* the development of their colleges' graduate homeland security curricula with the largest percentages reporting that 26.9% ( $n=14$ ) adoption/modification of CHDS course materials and 23.1% ( $n=12$ ) focus groups/advisory councils most influenced the development of their colleges' graduate homeland security curricula. Table 4.21 depicts the means and the means that most influenced the development of colleges' graduate curricula.

Table 4.21

*Frequency Statistics for Survey Question 18 & 20*

How did your college develop its graduate homeland security curriculum?

Which of the following most influenced the development of your college's graduate homeland security curricula?

Response Options	How Developed		Most Influenced	
	<i>n</i>	%	<i>n</i>	%
Adopted/modified CHDS course materials	31	59.6	14	26.9
Adopted/modified UAPI course materials (Other than CHDS materials)	23	44.2	4	7.0
Adopted/modified DHS course materials	20	38.5	1	1.9
Adopted/modified DOD course materials	17	32.7	3	5.8
Adopted/modified pre-existing department course materials	26	50	4	7.7
Adopted/modified course materials from other departments	19	36.5	2	3.8
Employed focus group/ advisory council	32	61.5	12	23.1
Employed accreditation/ agency process	24	46.2	4	7.7
Other	11	21.2	7	13.5

*Notes.* How Developed  $n=52$ ; Most Influenced  $n = 51$  due to one (1) research participant responding *no* to all SQ18 matrix questions and hence being excluded from SQ20. All percentages are predicated on  $n=52$

To analyze the importance of each of the means that research participants' colleges used to develop their graduate homeland security curricula, participants were

asked to rate the importance of each of the means that they reported were used in the development of the curricula. Response options included *very important*, *somewhat important*, *not too important*, and *not at all important*. Participants reported that each of the means were important to varying degrees, with the largest percentages of research participants reporting that 38.5 % ( $n=20$ ) CHDS course materials, 30.8% ( $n=16$ ) UAPI (other than CHDS) course materials, and 28.8% ( $n=15$ ) focus groups/advisory were *very important*.

As shown in Table 4.22, research participants reported that their colleges offered their graduate homeland security curricula through various program-delivery modes with 78.8 % ( $n=41$ ) colleges delivering at least part of their graduate homeland security curricula on-line, 36.5% ( $n=19$ ) on-line, 13.5% ( $n=7$ ) hybrid, and 28.8% ( $n=15$ ) a mixture of on-line and hybrid.

College graduate homeland security curricula program delivery modes are depicted in Table 4.22. The degrees of importance of means used to develop graduate homeland security curricula are depicted in Table 4.23.

Survey question 22 (SQ22) offered research participants the opportunity to add any comments regarding the development of their colleges' graduate homeland security curricula that were not covered in the study. Participant's comments included: used a combination of DHS, FEMA, DOD, and criminal justice resources for insights; most curricula content were determined by two instructors; one of whom had a criminal justice background and the other a public health-military-disaster background; program director paired with a faculty member experienced in homeland security to develop each course; traditional program delivery was used to facilitate veterans using the GI Bill benefit



requirements; used a needs assessment coupled with DOD guidance; and Homeland Security Studies track provides Defense Security Corporation Agency credentialing. Participants' specified *other* responses likely represents an increase in the role that focus groups/advisory councils played in the development of colleges graduate homeland security curricula.

Table 4.22

*Frequency Statistics for Survey Question 21*

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Which of the following best describes the program delivery of your college's graduate homeland security curriculum?

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Response Options	<i>n</i>	%
Traditional	11	21.2
On-Line	19	36.5
Blended (Hybrid, Traditional Classroom and on-line)	7	13.5
Mixture of traditional, on-line, and blended	15	28.8

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*Note. n = 52*

Table 4.23

*Frequency Statistics for Survey Question 19*

How important were each of the following in the development of your colleges graduate homeland security curriculum?

Response Options	Very Important		Somewhat Important		Not too Important	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
CHDS course materials ( <i>n</i> =31)	20	64.5	9	29.0	2	6.5
UAPI course materials (other than CHDS) ( <i>n</i> =23)	16	69.6	7	30.4	0	—
DHS course materials ( <i>n</i> =20)	8	40.0	12	60	0	—
DOD course materials ( <i>n</i> =17)	7	41.2	9	52.9	1	5.9
Pre-existing department course materials ( <i>n</i> =26)	12	46.2	11	42.3	3	11.5
Course materials from other departments ( <i>n</i> =19)	6	31.6	10	52.6	3	15.8
Focus group/ advisory council ( <i>n</i> =32)	15	46.9	12	37.5	4	12.5
Accreditation agency process ( <i>n</i> =24)	11	45.8	10	41.7	2	8.3
<i>Other</i> ( <i>n</i> =13)	8	72.7	2	18.2	1	9.1

*Notes.* Each response option *n* was predicated on the number of participants that selected corresponding response from SQ18. The table does not reflect one participant that reported that focus/advisory councils were *not at all important*.

**Research question five.** The following data analysis was related to Research Question Five (RQ5) *How do colleges categorize their graduate homeland security curricula?* Research participants were asked to rate the importance of the department that housed their colleges' graduate homeland security curricula and their colleges' administration in determining the categorization of their graduate homeland security curricula. The majority, 57.5% ( $n=30$ ) of participants reported that the department that housed their colleges' graduate homeland security curricula was very important while a much smaller percentage, 35% ( $n=13$ ) said that their colleges' administration was very important. The importance of departments that housed college graduate homeland security curricula and college administrations in determining the categorization of colleges graduate homeland security curricula are depicted in Table 4.24.

Table 4.24

*Frequency Statistics for Survey Question 24*

How important were each of the following in determining the categorization of your college's graduate homeland security curriculum?

Response Options	College Department		College Administration	
	<i>n</i>	%	<i>n</i>	%
Very important	30	57.7	13	25.0
Somewhat important	11	21.2	20	38.5
Not too important	7	13.5	14	26.9
Not at all important	4	7.7	5	9.6

*Note.*  $n = 52$

Research participants were asked to *best describe* how their colleges categorized (labeled) their graduate homeland security curricula. Research participants reported that

their colleges categorized their graduate homeland security curricula using various names. The vast majority of colleges, 71.2% ( $n=37$ ), categorized their graduate homeland security curricula as either Homeland Security, 32.7% ( $n=17$ ), Homeland Security and Criminal Justice, 19.2% ( $n=10$ ), or Homeland Security and Emergency Management, 19.2% ( $n=10$ ).

In addition, 12.8% ( $n=11$ ) participants reported that their colleges categorized their graduate homeland security curricula as Homeland Security and *Other* including: Homeland Defense, Terrorism, and Leadership; Safety Engineering; Integrated Homeland Security Management; Law; Management; Public Health Preparedness, Geospatial Intelligence, Information Security and Forensics, Agricultural Biosecurity and Food Defense, and Security Policy Studies.

Cumulatively, the percentage (32.7%,  $n=17$ ) of participants that reported that their colleges' graduate homeland security curricula was best described as Homeland Security per se; (b) the percentage (15.4%,  $n=8$ ) of college academic departments that housed graduate homeland security curricula that were best described by research participants as Homeland Security per se; and (c) the percentage (19.2%,  $n=10$ ) of faculty whose academic background was best described by research participants as Homeland Security per se suggests that homeland security is evolving as an academic discipline. The cumulative findings align with the research that suggests the emergence of homeland security as a new, emerging, and developing discipline (Center for Homeland Defense and Security, 2008, 2011a; Falkow, 2013; Palin, 2010; Recca, 2013; Supinski, 2012).

How colleges categorized their graduate homeland security curricula is depicted in Table 4.25.

Table 4.25

*Frequency Statistics for Survey Question 23*

Which of the following best describes how your college categorized (labeled) its graduate homeland security curriculum?		
Category	<i>n</i>	%
Homeland Security and Criminal Justice	10	19.2
Homeland Security and Emergency Management	10	19.2
Homeland Security and Intelligence	1	1.9
Homeland Security	17	32.7
Homeland Security and National Security Affairs/ International Security Affairs	2	3.8
Homeland Security and Public Administration/ Public Policy	1	1.9
Homeland Security and Other	11	21.2

*Note.* *n* = 52

Survey question 25 (SQ25) asked participants to identify the disciplinary approach to their colleges' graduate homeland security curriculum. The vast majority, 84.6% (*n*=44), reported that their colleges' graduate homeland security curricula was either multidisciplinary, 44.2% (*n*=23) or interdisciplinary, 40.4% (*n*=21). As was the

case of this research study's analysis of undergraduate homeland security curricula, this validated the research literature that suggested that homeland security as a field of study or an academic discipline was, or should be multidisciplinary and/or interdisciplinary (California State University, Council for Emergency Management and Homeland Security, 2012; Charting a Course for Homeland Security Strategic Studies Conference, 2005; Church, 2008; Clement, 2011; Falkow, 2013; Kiltz, 2009, 2011; McCreight, 2009, 2011, 2014; National Research Council Committee on Education Paradigms for Homeland Security, 2005; Pelfrey & Kelley, 2013; Polson et al., 2010; Ramsay et al., 2010; Renda-Tanali, 2012; Rollins & Rowan, 2007; Smith, 2005; Supinski, 2012). Colleges' graduate homeland security disciplinary approaches are presented in Table 4.26.

Survey question 26 (SQ26) asked participants to report topics that their colleges' graduate homeland security curricula included. All but one participant,  $n=51$  (98.1%) reported that their college's graduate homeland security curricula included terrorism. Following directly behind terrorism were emergency management and preparedness, each at  $n=49$  (94.2%), critical thinking at  $n=48$  (92.3%),  $n=47$  (90.4%) for strategy, all-hazards, and critical infrastructure,  $n=46$  (88.5%) for collaboration, and  $n=46$  (88.5%) for intelligence and risk management.

In addition,  $n=13$  (25%) participants reported that their colleges offered or were considering offering *other* topics including: agricultural biosecurity and food defense; comparative law, counterterrorism, constitutional issues, domestic military operations; defense support of civil authorities; environmental protection; general management; capstone; management; maritime security and transnational criminal organizations;

military science; military support of humanitarian assistance; and leadership and safety. Topics that colleges included in their graduate homeland security curricula are depicted in Table 4.27.

The large number of topics that were included in colleges' graduate homeland security curricula mirrors the research that revealed the range and vastness of homeland security as a field, field of study, or discipline (Bellavita, 2014; Bellavita & Gordon, 2006; Charting a Course for Homeland Security Strategic Studies Conference, 2005; Falkow, 2013; McCreight, 2014; National Research Council's Committee on Educational Paradigms, 2005; Ramsay, 2013; Reese, 2013,2014; Rollins & Rowan, 2007; U.S. Department of Homeland Security, 2014b).

Survey question 27 (SQ27) offered research participants the opportunity to add any comments regarding the categorization of their colleges' graduate homeland security curricula that they felt were not covered in the survey. Participants comments included: program focused on homeland security law that required base knowledge in 10 key disciplines including emergency management, domestic intelligence, critical infrastructure and cyber, public health, transportation security, counter-terrorism and counter-radicalization, domestic military operations, immigration, border security, and countering weapons of mass destruction and chemical, biological, radiological, nuclear, and explosive agents; completion of courses results in military certification and skill identifier at the low end, a training certificate at the mid-range, and a homeland security masters at the top end; holistic approach taken and required research course; curriculum is an intercollege masters' degree that included numerous colleges and campuses; most frequent question asked by prospective students was if homeland security or emergency

management was applied differently in the field; and other aspects included agricultural security and military forces supporting domestic incidents that were vital at both the undergraduate and graduate level.

Table 4.26

*Frequency Statistics for Survey Question 25*

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Which of the following best describes your college's graduate homeland security curricula?

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Response option	<i>n</i>	%
Single Discipline (curriculum focus is on a single discipline)	8	15.4
Multidisciplinary (curriculum includes multiple perspectives)	23	44.2
Interdisciplinary (curriculum integrates multiple perspectives and disciplines)	21	40.4

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*Note. n = 52*



Table 4.27

*Frequency Statistics for Survey Question 26*

Does your college's graduate homeland security curriculum include the following topics?

Response Option	<i>n</i>	%
Terrorism	51	98.1
Critical Thinking	48	92.3
Collaboration	46	88.5
Intelligence	46	88.5
Strategy	47	90.4
All-hazards	47	90.4
Critical Infrastructure	47	90.4
Emergency Management	49	94.2
Preparedness	49	94.2
Risk Management	46	88.5
Cyber Security/IT	47	90.4
Law	42	80.8
Public Administration/ Policy	35	67.3
Resilience	40	76.9
National Security Affairs/ International Affairs	42	80.8
Immigration	31	59.6
Mapping (GIS)	24	46.2
Public Health	31	59.6
Emergency Medical Services	20	38.5
Fire Science	10	19.2
<i>Other</i>	13	25.0

*Note. n = 52*

**Research question six.** The following data analysis was related to Research Question Six (RQ6): *How do colleges ensure that their graduate homeland security curricula remain current as homeland security needs change?* Survey question 28 (SQ28) permitted respondents to choose multiple answers to best convey the means that their colleges used to ensure that the curricula remained current. Participants reported that their colleges used multiple and varied means with the vast majority reporting that faculty (90.4%,  $n=47$ ) conducted independent research, 90.4% ( $n=47$ ) reviewed current homeland security academic literature; 95% ( $n=57$ ) reviewed current government homeland security policy directives, 84.6% ( $n=44$ ) solicited student input/feedback, 84.6% ( $n=44$ ) reviewed current government homeland security policy directives, 78.8% ( $n=41$ ) attended national homeland security conferences. In addition, 17.3% ( $n=9$ ) reported that their colleges employed *other* means to keep their graduate homeland security curricula current including: employer feedback; faculty are former/current practitioners who maintain currency through training and networks; faculty continues formal education; faculty meet individually with subject matter experts; faculty publish peer reviewed articles; cited new military doctrine, and student research.

Research participants also reported that various means were the most important in ensuring that their graduate homeland security curricula remained current with the largest percentage, 32.7% ( $n=17$ ) reporting that faculty reviewed current government homeland security policy directives and strategies as most important, followed by 15.4% ( $n=8$ ) for both faculty conducting independent research and faculty reviewing current homeland security academic literature. How colleges kept their graduate curricula current and

which factors were the most important in ensuring that curricula remained current are depicted in Table 4.28.

Table 4.28

*Frequency Statistics for Survey Questions 28 & 29*

How does your college keep its graduate homeland security curriculum current?

Which of the following was the most important factor in how your college kept its undergraduate homeland security curriculum current?

Response options	Means used		Most Important	
	<i>n</i>	%	<i>n</i>	%
Faculty review current homeland security academic literature	47	90.4	8	15.4
Faculty review current government homeland security policy directives and strategies	44	84.6	17	32.7
Faculty solicits student input/feedback	44	84.6	1	1.9
Faculty review UAPI website for new and updated course material	33	63.5	4	7.7
Faculty conducts independent research	47	90.4	8	15.4
Faculty attends national homeland security conferences	41	78.8	3	5.8
Faculty convenes focus group/advisory councils	27	51.9	5	9.6
Other	9	17.3	5	9.6

*Notes.* *n* = 52. *Most Important n* = 51. One participant responded *no* to all of SQ28 response options and was, therefore, excluded from SQ29. All percentages reflect *n*=52.

Survey question 30 (SQ30) asked participants how much their colleges' graduate homeland security curricula changed since it was first offered. The vast majority (92.3%,  $n=48$ ) of participants reported that their colleges' graduate homeland security curricula had changed at least somewhat with 32.7% ( $n=17$ ) reporting that the curricula had changed a lot, and 59.6% ( $n=31$ ) reporting that the curricula had changed somewhat. This mirrored the research that suggested that homeland security was an evolving field, field of study, or discipline (Bellavita, 2014; Bellavita & Gordon, 2006; Charting a Course for Homeland Security Strategic Studies Conference, 2005; Falkow, 2013; McCreight, 2014; National Research Council's Committee on Educational Paradigms, 2005; Ramsay, 2013; Reese, 2013, 2014; Rollins & Rowan, 2007; U.S. Department of Homeland Security, 2014b). The degrees to which college graduate homeland security curricula were modified since they were first offered are depicted in Table 4.29.

Table 4.29

*Frequency Statistics for Survey Question 30*

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Since your college first offered its graduate homeland security curriculum, how much has the curriculum been modified?

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Response options	<i>n</i>	%
A lot	17	32.7
Somewhat	31	59.6
Just a little	3	5.8
None	1	1.9

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*Note.*  $n = 52$

Survey question 31 (SQ31) offered participants the opportunity to add any comments relevant to how their colleges kept their graduate curricula current that were not covered in the survey that might be relevant to the study. Participants responses included: homeland security leadership component was added to an existing criminal justice leadership program; advisory councils are conducted at least every other year, feedback from graduates and DHS employees; curriculum content was intersected and de-conflicted; courses were revised every time they were taught; regular curriculum reviews with program sponsors DHS/FEMA; annual workshop at Naval Post Graduate School was helpful; faculty members completed academic fellowships to study terrorism in Israel; focus was on the 10 subjects that were believed to constitute homeland security in the U.S. and syllabus evolved to reflect law and policy changes; and curriculum was adjusted to stay aligned with the U.S. Northern Command. U.S. Northern Command is a single US military command comprised of all branches of the U.S. military that is charged with protecting the homeland and providing support to civil authorities during national emergencies (U.S. Northern Command, 2014).

### **Summary of Results**

This research study was designed to analyze the homeland security curricula policies of colleges in the United States. Specifically, the study looked at how colleges developed, categorized, and ensured that their homeland security curricula remained current as homeland security needs changed.

The study results were obtained from an Internet-based survey of faculty at colleges in the United States. The population of 587 college faculty resulted in a voluntary return of 86 participants.

Screening questions identified research participants' positions at their institutions; level of involvement in the development, categorization, and ensuring that their colleges' homeland security curricula remained current; and levels of colleges' homeland security curricula. The screening information on each research participant and their college was self-identified by research participants. The vast majority of research participants, 88.8% ( $n=67$ ) were full-time faculty, and 83.7% ( $n=72$ ) of all faculty were very involved in the development, categorization, and ensuring that their colleges' homeland security curricula remained current. Sixty (69.8%) of research participants' colleges offered undergraduate homeland security curricula,  $n=52$  (60.5%) offered graduate homeland security curricula, and  $n=26$  (30.2%) offered both undergraduate and graduate homeland security curricula.

The demographic information on each college was self-identified by their faculty. The colleges consisted of a mix of public, private, four-year, two-year, and military colleges. Colleges were located throughout the U.S. and 93% ( $n=80$ ) were accredited by one of six U.S. Department of Education recognized regional accrediting agencies. The sizes of student populations at participating colleges varied from, under 1,000 to over 10,000 students. The sizes of student populations enrolled in homeland security programs at both the undergraduate and graduate level varied from, 1-50, to more than 100. The years that colleges established their homeland security programs also varied, from prior to 2002 to 2014.

Departments that housed college homeland security curricula bore varied names with the largest percentages reported as: 26.7% ( $n=23$ ) Criminal Justice, 11.6% ( $n=10$ ) Homeland Security, and 8.1 % ( $n=7$ ) Public Administration. Faculty from those

departments had multiple and varied academic backgrounds. Moreover, various academic backgrounds best described the academic background of departments with the largest percentage, 30.2% ( $n=26$ ) reported as mixed to the extent that no academic background represented a majority, followed by 26.7% ( $n=23$ ) Criminal Justice, 15.1% ( $n=13$ ) Homeland Security, and 7% ( $n=6$ ) Emergency Management. Faculty size for both full-time and part-time faculty varied from 1-10, to 11-16 or more faculty.

The survey then questioned participants on the development, categorization, and ensuring that their undergraduate/graduate homeland security curricula remained current. Owing to the unresolved debate about the efficacy of undergraduate homeland security curricula (Bellavita, 2012; Collier, 2013; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Pelfrey & Kelley, 2013; Pelfrey et al., 2002), undergraduate and graduate homeland security curricula were analyzed separately.

Colleges used multiple and varied means to develop their undergraduate and graduate homeland security curricula. The following analysis aggregates participants' responses to undergraduate and graduate curricula survey questions. Unless otherwise specified, the aggregate number  $n=112$  represents the total undergraduate ( $n=60$ ) and graduate programs ( $n=52$ ) homeland security curricula. In the aggregate, focus group/advisory councils (62.5%) and adopting/modifying CHDS course materials (50.9%) respectively represented the means most used to develop undergraduate and graduate homeland security curricula. CHDS course materials played a significantly larger role in graduate than undergraduate homeland security curricula,  $n=26$  (43.3%) of participants reported that they adopted/modified CHDS course materials for their

undergraduate curricula and  $n=31$  (59.6%) reported that they adopted/modified CHDS course materials for their graduate curricula.

CHDS course materials (29.4%) and focus groups (24.1%) respectively *most influenced* the development of undergraduate and graduate homeland security curricula. Again, CHDS course materials were significantly more important in the development of graduate compared to undergraduate homeland security curricula,  $n=6$  (10.5%) of participants reported that CHDS course materials most influenced the development of their undergraduate curricula and  $n=14$  (27.5%) reported that the materials most influenced the development of their graduate curricula. The variances between the role of CHDS course materials in the development of undergraduate and graduate curricula is likely due to the existence of CHDS' graduate homeland security curriculum and the nonexistence of a CHDS undergraduate curriculum.

Colleges used varied means to deliver their undergraduate and graduate homeland security curricula with the vast majority (79.5%,  $n=89$ ) of colleges delivering at least part of their homeland security curricula on-line. There were no significant differences between undergraduate and graduate curricula.

Departments that housed college undergraduate and graduate homeland security curricula and college administrations both played a role in the categorization of the curricula with the vast majority (63.4 %,  $n=71$ ) of departments rated as being very important as compared to 23.2% ( $n=26$ ) of college administrations that were rated very important. There were no significant differences between undergraduate and graduate curricula.



Colleges used various names to categorize their undergraduate and graduate homeland security curricula with the vast majority of participants (71.4%,  $n=80$ ) reporting that their colleges categorized the curricula as either 24.1 % ( $n=27$ ) Homeland Security and Emergency Management, 20.5% ( $n=23$ ) Homeland Security and Criminal Justice, or 29.4% ( $n=30$ ) Homeland Security. Homeland Security and Emergency Management curricula were more likely to be found in undergraduate programs,  $n=17$  (21.6%) colleges categorized their undergraduate curricula Homeland Security and Emergency Management and  $n=10$  (19.2%) colleges categorized their graduate curricula as Homeland Security and Emergency Management. Homeland Security and Criminal Justice curricula were slightly more likely to be found in undergraduate programs,  $n=13$  (21.7%) colleges categorized their undergraduate curricula as Homeland Security and Criminal Justice and  $n=10$  (19.2%) of colleges categorized their graduate curricula as Homeland Security and Criminal Justice. Conversely, Homeland Security per se curricula were more likely to be found in graduate programs,  $n=17$  (32.7%) colleges categorized their graduate curricula as Homeland Security and  $n=13$  (21.7%) colleges categorized their undergraduate curricula as Homeland Security.

The vast majority (83%,  $n=93$ ) of colleges' approach to their undergraduate and graduate homeland security curricula was either multidisciplinary or interdisciplinary rather than a unidisciplinary approach. Colleges included numerous and varied topics in their curricula with  $n=111$  (99.1%) terrorism,  $n=107$  (95.5%) critical thinking, and  $n=103$  (92%) intelligence topping a list of 21 topics. There were no significant differences between undergraduate and graduate curricula.

Colleges used multiple and varied means to ensure that their undergraduate and graduate homeland security curricula remained current with the vast majority (75% or higher) reviewing current academic and government literature and policy; soliciting student input/feedback; reviewing UAPI website for new course material; conducting independent research; and attending conferences. The majority of colleges (57.1%,  $n=38$ ) convened focus groups. Colleges were more likely to review the UAPI website to ensure that their undergraduate curricula (85%,  $n=51$ ) remained current than for their graduate curricula (63.5%,  $n=33$ ). In addition, colleges were more likely to convene a focus group to ensure that their undergraduate curricula (61.7%,  $n=37$ ) remained current than for their graduate curricula (51.9%,  $n=27$ ). Varied means were reported as most important with the largest percentages of research participants reporting that reviewing current government homeland security policy directives and strategies (30.4%,  $n=34$ ) and reviewing current homeland security academic literature (18.8%,  $n=21$ ) respectively were the most important. There were no significant differences between undergraduate and graduate curricula.

Colleges' undergraduate and graduate homeland security curricula were modified to varying degrees since they were first offered with the vast majority, 85.7%, being modified at least somewhat. Graduate curricula (92.3%,  $n=48$ ) were more likely to be modified than were undergraduate curricula (80%,  $n=48$ ).

## **Chapter 5: Discussion**

### **Introduction**

In the wake of the September 11, 2001 terrorist attacks on the United States, the nation's colleges were called upon to help prepare members of the homeland security enterprise to secure the nation. Homeland security was a wicked policy issue that could not be described definitively and did not have any ultimate or objective answers. At first, homeland security was a national effort to protect against, prevent, prepare for, respond to, and recover from those attacks that did occur. In the aftermath of Hurricane Katrina in 2005, homeland security was a national effort to protect against, prevent/mitigate, prepare for, respond to, and recover from all-hazards to the nation. Most recently, homeland security was "a homeland that is safe, secure, and resilient against terrorism and other hazards, where American interests, aspirations, and way of life can thrive" (U.S. Department of Homeland Security, 2014, p.14).

The national emphasis on homeland security illuminated the critical need and demand for quality educational programs that provided professionals with the fundamental knowledge and skills to meet the nation's homeland security requirements. The nation's colleges were called upon to prepare members of the homeland security enterprise to make the nation safe, secure, and resilient. Leading the collegiate effort was the Center for Homeland Defense and Security (CHDS). CHDS was created by Congress, DOJ, and DOD in April 2002 to: educate and prepare a cadre of local, state, tribal, and federal leaders to collaborate across professional disciplines and levels of

government to secure the homeland; define through evidence-based research the emerging discipline of homeland security; facilitate the development of a national homeland security education system by using an open source model to develop programs and curricula; and to share those resources with other academic institutions and agencies (Center for Homeland Defense and Security, 2011).

CHDS' programs and resources included a homeland security masters' degree program and a University and Agency Partnership Initiative (UAPI). The essence of the graduate curriculum was to prepare homeland security leaders to operate in an environment of extreme ambiguity with an emphasis on critical thinking around homeland security issues. UAPI was established to share the CHDS curriculum and educational resources with academic institutions. As a result, over 290 U.S. colleges developed over 400 homeland security curricula each claiming to prepare students for homeland security.

Colleges' homeland security curricula were located in various academic departments, were taught by faculty from various academic disciplines, and bore various program names. The curricula were mostly located, taught, and bore program names that resembled criminal justice, emergency management, and homeland security per se. Colleges convened focus groups and advisory councils, and adopted and modified existing courses from their institutions and course materials from CHDS, UAPI, DHS, and others. The curricula were mostly multidisciplinary/interdisciplinary and contained multiple and varied subjects. Such curricula emphasized terrorism, collaboration, intelligence, strategy, all-hazards, critical infrastructure, emergency management, preparedness, risk management, cyber security/IT, and law.

The discipline of homeland security is still emerging and evolving and there is little consensus about what homeland security actually is. Therefore, it is difficult to determine how homeland security curricula should prepare students for homeland security. The purpose of this study is to describe how homeland security curricula are being developed in the nation's colleges.

An Internet-based survey, designed to assess how colleges develop, categorize, and ensure that their homeland security curricula remain current was forwarded to 587 prospective participants who were identified as faculty members associated with college homeland security programs by the UAPI (Center for Homeland Defense and Security, 2014c, 2014d). The survey was administered to the entire population and resulted in a preliminary voluntary return rate of  $n=102$  (17.4%). However, 16 respondents were deemed ineligible because they failed to meet the faculty requirement or were not at least somewhat involved in the development, categorization, and ensuring that their colleges' homeland security remained current. The final response rate was  $n=86$  (14.6%).

### **Implications of Findings**

The implications of the findings relate to the development, categorization, and ensuring that homeland security curricula remain current as homeland security needs change. The implications are discussed as they apply to the six research questions. Owing to the unresolved debate about the efficacy of undergraduate homeland security curricula (Bellavita, 2012; Collier, 2013; Morton, 2012; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Pelfrey & Kelley, 2013; Pelfrey et al., 2002), undergraduate and graduate homeland security curricula were analyzed separately.

Included in this discussion is the relationship of the study's theoretical rationale, collaborative federalism as it relates to the results of the research. Collaborative federalism holds that the nation should aggregate, coordinate, and integrate its homeland security capabilities to achieve the highest level of homeland security preparedness through collaboration (Clovis, 2006). College level homeland security curricula designed to prepare students for homeland security are critical to that end.

**Undergraduate homeland security curricula.** Research questions one through three discuss the development, categorization, and ensuring that undergraduate homeland security curricula remain current as homeland security needs change.

**Research question one.** *How do colleges develop their undergraduate homeland security curricula?* McCune's (1986) curricula planning process aptly employed by Pelfrey et al. (2002) in their seminal homeland security curriculum initiative asks: *Where are we going? What do we do to get there?* Research question one focused on what colleges actually did to develop their undergraduate homeland security curricula. Colleges used multiple and varied means to develop their undergraduate homeland security curricula, 38% or higher of research participants' colleges employed focus groups/advisory councils and accreditation/agency processes and adopted preexisting department, DHS, CHDS, and UAPI (other than CHDS) course materials. In addition, 21% of research participants' colleges employed *other* means that ranged from starting from scratch and adopting graduate level courses to soliciting input from homeland security officials and stakeholders.

Focus group/advisory councils (63.3%,  $n=38$ ), adopting/modifying pre-existing department materials (46.7%,  $n=28$ ), and adopting/modifying DHS course materials

(46.7%,  $n=28$ ), represent the means most used. Focus groups/advisory councils (25%,  $n=15$ ) and adopting/modifying pre-existing department materials (16.7%,  $n=10$ ) also represent the means that *most influenced* the development of the curricula. Focus groups/advisory councils (38.3%,  $n=23$ ), DHS course materials (25%,  $n=15$ ), CHDS course materials (23.3%,  $n=14$ ), and preexisting department course materials (23.3%,  $n=14$ ) represent the means that were most rated as *very important* in the development of the curricula. In addition, colleges use varied means to deliver their undergraduate homeland security curricula with the vast majority (80%) of colleges delivering at least part of the curricula on-line. Comparatively in 2012, the percentage of college students in the U.S. taking at least one on-line course was at an all-time high of 33.5% (Allen & Seaman, 2014).

**Research question two.** *How do colleges categorize their undergraduate homeland security curricula?* Employing, McCune's (1986) curricula planning process, research question two focused on what colleges actually did to categorize their undergraduate homeland security curricula. Colleges use various names to categorize their undergraduate homeland security curricula that range from emergency management and criminal justice to cyber and corporate security. The vast majority of participants (71.7%,  $n=43$ ) report that their colleges categorize the curricula as either Homeland Security and Emergency Management (28.3%,  $n=17$ ), Homeland Security and Criminal Justice (21.7%,  $n=13$ ), or Homeland Security (21.7%,  $n=13$ ).

The varied categorization of undergraduate homeland security curricula with concentrations in emergency management and criminal justice validates the research that suggests that: (a) the breadth of homeland security warrants a wide range of programs,

(National Research Council, Committee of Educational Paradigms for Homeland Security, 2005) and (b) the majority of homeland security programs are linked to three primary content areas: emergency management, criminal justice, and public administration, but also resides in political science, history, psychology, public health, law, and other academic departments. In the case of public administration, this research study varied from the literature in that no research participants reported that their college categorized their undergraduate homeland security curricula as public administration (Center for Homeland Defense and Security, 2014d; Supinski, 2011, 2012).

The vast majority (81.7%,  $n=49$ ) of colleges' approach to undergraduate homeland security curricula was multidisciplinary/interdisciplinary rather than unidisciplinary. This is a significant departure from what Friedman, Friedman, and Hampton-Sosa (2013) referred to as “academic bigotry—i.e. disciplinary elitism” (p.2) that permeates colleges in direct opposition to an otherwise open minded culture that opposes bigotry and intolerance. Seemingly, higher education homeland security academics have: (a) achieved one of the essential goals of a liberal arts higher education, focusing on problems rather than academic disciplines (Dewey, 1916); (b) identified substantive and theoretical links between disciplines despite their fractal distinctions (Abbot, 2001); and (c) eschewed the rigidity and narrow-mindedness of disciplinary elitism, and are communicating across disciplines, collaborating, and adapting to rapidly changing conditions inherent to the modern world (Friedman, Friedman, & Hampton-Sosa, 2013).

Furthermore, homeland security academics seem to be dissolving the semantic homeland security stovepipes that Bellavita (2008) argued insisted on one worldview and



impeded the strategic goal of a secure homeland. Academic homeland security may be what Werth (2003) described as a *meta-discipline*—a larger curricular focus that transcends traditional disciplinary boundaries to create a truly holistic, systemic, integrative worldview uncluttered by familiar limits and barriers. A metadisciplinary focus assumes that all such fields are related theoretically and practically.

This study's theoretical rationale, collaborative federalism, (Clovis, 2006) found that different levels of government hold different perspectives on federalism. They must aggregate, coordinate, and integrate their homeland security capabilities to ensure the greatest level of national preparedness. Academic disciplines, under the lens of homeland security undergraduate curricula, appear to have aggregated, coordinated, and integrated their capabilities to prepare students for homeland security.

Research participants' colleges include numerous and varied topics in their undergraduate homeland security curricula with terrorism ( $n=60$ , 100%), critical thinking ( $n=59$ , 98.3%), intelligence ( $n=57$ , 95%), collaboration ( $n=56$ , 93.3%), and strategy, all-hazards, and critical infrastructure each at  $n=55$  (91.7%), topping a list of 21 topics (Table 4.18). Moreover, participants report that their colleges offer or were considering offering *other* topics not specified on the survey questionnaire that range from cultural compliance and ethics to maritime security and public and private partnerships.

Despite the range and vastness of homeland security, colleges consistently agree (85% or higher) that undergraduate homeland security curricula should consist of 11 topics that include: terrorism, critical thinking, collaboration, intelligence, strategy, all-hazards, critical infrastructure, emergency management, preparedness, risk management, and cyber security. The majority (51% or higher) of colleges also agree on six other

topics that include: public administration/policy, resilience, national security affairs/international affairs, immigration, mapping (GIS), and public health (Table 4.14). This affirms the conclusion of Bellavita and Gordon (2006) that the “discipline” of homeland security was actively working to identify core ideas with which anyone who wished to speak intelligently about homeland security had to be conversant. Bellavita and Gordon also argued that the homeland security discipline was in a pre-paradigm phase and that there was no “conceptual” agreement about the range of topics that constituted the field of study. They thought that was a “good thing.” The data from these findings suggest that the homeland security paradigm is evolving and that the large range of topics might well be a “good thing.”

Significantly, terrorism, collaboration, intelligence, strategy, all-hazards, critical infrastructure, emergency management, preparedness, risk management, cyber security/IT, and law that were included by the vast number of research participants’ colleges undergraduate homeland security curricula, (85% or higher) all play a prominent role in the most recent homeland security policy guidance (U.S. Department of Homeland Security, 2014a). Moreover, the inclusion of terrorism by all research participants’ colleges mirrors current White House and DHS policy that clearly identifies counterterrorism as the primary homeland security objective. On May 28, 2014, President Barack Obama stated that “for the foreseeable future, the most direct threat to America at home and abroad remains terrorism” (Obama, 2014, para 19). The 2014 Quadrennial Homeland Security Review published in June of 2014 maintained that “preventing terrorist attacks on the Nation is, and should remain the cornerstone of homeland security” (U.S. Department of Homeland Security, 2014a, p.6).

Cumulatively, (a) the percentage (21.7%,  $n=13$ ) of participants that reported that their colleges' undergraduate homeland security curricula was best described as Homeland Security per se; (b) the percentage (10%,  $n=6$ ) of college academic departments that located undergraduate homeland security curricula that were best described by research participants as Homeland Security per se; and (c) the percentage (13.3%,  $n=8$ ) of faculty whose academic background was best described by research participants as Homeland Security per se, suggests that homeland security is evolving as an academic discipline. It appears that a significant number of colleges and academics are accepting and converting to homeland security in what Kuhn (1996) referred to as a new *paradigm*; "universally recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners" (Kuhn, 1996, p. x).

A paradigm is a constellation of group commitments to a particular discipline wherein the community of practitioners share: (a) symbolic generalizations (core beliefs), (b) commitment to meta-physical parts of the paradigm, (c) values and particularly among those that differ in their application, and (d) paradigm exemplars (Kuhn, 1996). The findings follows the research that suggests the emergence of homeland security as a new, emerging, and developing discipline (Center for Homeland Defense and Security, 2008, 2011a; Falkow, 2013; Palin, 2010; Recca, 2013; Supinski, 2012).

**Research question three.** How do colleges ensure that their undergraduate homeland security curricula remain current as homeland security needs change? Employing, McCune's (1986) curricula planning process, research question three focused on what colleges actually did to keep their undergraduate homeland security curricula current as homeland security needs change. Colleges use multiple and varied means to

keep the curricula current with the vast majority (80% or higher) reviewing current academic and government literature and policy; soliciting student input/feedback; reviewing UAPI website for new course material; conducting independent research; and attending conferences. The majority of colleges 61.7% ( $n=38$ ) convene focus groups. Study participants also report that their colleges employ *other* means ranging from “information sources were anything we could get our hands on” and seeking advice from faculty that worked in the field, to requiring course revision cycles. Varied means were reported as *most important* with the largest percentages of research participants reporting that reviewing current government homeland security policy directives and strategies (28.3%,  $n=17$ ) and reviewing current homeland security academic literature (21.7%,  $n=13$ ) were the most important.

Colleges undergraduate homeland security curricula were modified to varying degrees since they were first offered with the vast majority (80%) being modified at least *somewhat*. Ostensibly, colleges are adapting their undergraduate homeland security curricula to meet the challenges of the dynamic and rapidly evolving homeland security threat landscape (U.S. Department of Homeland Security, 2014; Worldwide Threat Assessment, 2014a).

**Graduate homeland security curricula.** Research questions four through six discuss the development, categorization, and ensuring that graduate homeland security curricula remain current as homeland security needs change.

**Research question four.** *How do colleges develop their graduate homeland security curricula?* Employing, McCune’s (1986) curricula planning process, research question four focused on what colleges actually did to develop their graduate homeland

security curricula. Colleges use multiple and varied means to develop their graduate homeland security curricula, 38% or higher of research participants' colleges employ focus groups/advisory councils and accreditation/agency processes and adopt preexisting department, DHS, CHDS, and UAPI (other than CHDS) course materials. In addition, 21% of research participants' colleges employ *other* means that range from starting from scratch and adopting graduate level courses to soliciting input from homeland security officials and stakeholders.

Focus group/advisory councils (61.5%,  $n=32$ ) and adopting/modifying CHDS course materials (59.6%,  $n=31$ ) represent the means most used. Adopting/modifying CHDS course materials (26.9 %,  $n=14$ ) and focus groups/advisory councils (23.1%,  $n=12$ ) also represent the means that *most influenced* the development of the curricula. In addition, adopting/modifying CHDS course materials (38.5%,  $n=20$ ), adopting/modifying UAPI (other than CHDS) course material (30.8%,  $n=16$ ), and focus groups/advisory councils (28.8 %,  $n=15$ ) represent the means that were most rated as *very important* in the development of the curricula. Numerous research participants' comments referenced exchanges with officials and subject matter experts suggesting that the role of focus groups/advisory councils plays an even larger role in the development of the curricula.

In addition, colleges use varied means to deliver their graduate homeland security curricula with the vast majority (78.8%) of colleges delivering at least part of the curricula on-line. Comparatively in 2012, the percentage of college students in the U.S. taking at least one on-line course was at an all-time high of 33.5% (Allen & Seaman, 2014).

Significant variances between the way colleges develop their undergraduate and graduate homeland security curricula are limited to the role of CHDS course materials, 43.3% ( $n=26$ ) of research participants report that their colleges adopt/modify CHDS course materials for their undergraduate curricula as compared to 59.6% ( $n=31$ ) of participants that report that their colleges adopt/modify CHDS course materials for their graduate curricula. Moreover, 10% ( $n=6$ ) of research participants report that CHDS course materials *most influenced* the development of their undergraduate homeland security curricula as compared to 26.9% ( $n=14$ ) of participants that report CHDS course materials *most influenced* the development of their graduate homeland security curricula. The variances are likely due to the existence of CHDS' graduate homeland security curriculum and the nonexistence of a CHDS undergraduate curriculum.

**Research question five.** *How do colleges categorize their graduate homeland security curricula?* Employing McCune's (1986) curricula planning process, research question five focused on what colleges actually do to categorize their graduate homeland security curricula. Colleges use various names to categorize their graduate homeland security curricula that range from emergency management and criminal justice to cyber and corporate security. The vast majority of participants (71.2%,  $n=37$ ) report that their colleges categorized the curricula as either Homeland Security (32.7%,  $n=17$ ), Homeland Security or Emergency Management (19.2%,  $n=10$ ), or Homeland Security and Criminal Justice (19.2%,  $n=10$ ).

The varied categorization of graduate homeland security curricula with concentrations in emergency management and criminal justice validates the research that suggests that: (a) the breadth of homeland security warranted a wide range of programs

(National Research Council, Committee of Educational Paradigms for Homeland Security, 2005); and (b) the majority of homeland security programs are linked to three primary content areas: emergency management, criminal justice, and public administration, but also reside in political science, history, psychology, public health, law, and other academic departments. In the case of public administration, this research study varies from the literature in that only one research participant reported that their college categorizes their graduate homeland security curricula as public administration (Center for Homeland Defense and Security, 2014d, Supinski, 2011, 2012).

The vast majority (84.6%,  $n=44$ ) of colleges' approach to graduate homeland security curricula is multidisciplinary/interdisciplinary rather than unidisciplinary. As was the case of undergraduate homeland security curricula, this is a significant departure from what Friedman, Friedman, and Hampton-Sosa (2013) refer to as “academic bigotry—i.e. disciplinary elitism” that permeates colleges in direct opposition to an otherwise open minded culture that opposes bigotry and intolerance (p.2). Again, it seems that higher education homeland security academics have: (a) achieved one of the essential goals of a liberal arts higher education, focusing on problems rather than academic disciplines (Dewey, 1916); (b) identified substantive and theoretical links between disciplines despite their fractal distinctions (Abbot, 2001); and (c) eschewed the rigidity and narrow-mindedness of disciplinary elitism and are communicating across disciplines, collaborating, and adapting to rapidly changing conditions inherent to the modern world (Friedman, Friedman, & Hampton-Sosa, 2013). Homeland security academics seem to be dissolving the semantic homeland security stovepipes that

Bellavita (2008) argued insisted on one worldview and impeded the strategic goal of a secure homeland and may be a meta-discipline.

This study's theoretical rationale, collaborative federalism (Clovis, 2006) found that different levels of government held different perspectives on federalism. They must aggregate, coordinate, and integrate their homeland security capabilities to ensure the greatest level of national preparedness. Academic disciplines under the lens of homeland security graduate curricula appear to have aggregated, coordinated, and integrated their capabilities to prepare students for homeland security.

Colleges include numerous and varied topics in their graduate homeland security curricula with terrorism ( $n=51$ , 98.1%), emergency management and preparedness each at  $n=49$  (94.2%), and critical thinking ( $n=48$ , 92.3%) topping a list of 21 topics (See Table 4.18). Moreover, participants report that their colleges offer or were considering offering *other* topics not specified on the survey questionnaire that range from agricultural biosecurity and food defense to military support of humanitarian assistance and leadership and safety.

Despite the range and vastness of homeland security, colleges consistently agree (85% or higher) that graduate homeland security curricula should consist of 11 topics that include: terrorism, critical thinking, collaboration, intelligence, strategy, all-hazards, critical infrastructure, emergency management, preparedness, risk management, and cyber security. The majority (59% or higher) of colleges also agree on five other topics that include: public administration/policy, resilience, national security affairs/international affairs, immigration, and public health (See Table 4.14). This affirms the conclusion of Bellavita and Gordon (2006) that the "discipline" of homeland



security is actively working to identify core ideas with which anyone who wishes to speak intelligently about homeland security has to be conversant. Bellavita and Gordon also argue that the homeland security discipline is in a pre-paradigm phase and that there is no “conceptual” agreement about the range of topics that constitutes the field of study. They thought that was a “good thing.” The data from these findings suggest that the homeland security paradigm is evolving and that the large range of topics might well be a “good thing.”

Significantly, terrorism, collaboration, intelligence, strategy, all-hazards, critical infrastructure, emergency management, preparedness, risk management, cyber security/IT, and law that are included in the vast number of research participants’ colleges graduate homeland security curricula, (85% or higher) all play a prominent role in the most recent homeland security policy guidance (U.S. Department of Homeland Security, 2013b, 2014a). Moreover, the inclusion of terrorism by all but one research participant’s college mirrors current White House and DHS policy that clearly identifies counterterrorism as the primary homeland security objective (Obama, 2014; U.S. Department of Homeland Security, 2014a).

Cumulatively the percentage (32.7%,  $n=17$ ) of participants that report that their colleges’ graduate homeland security curricula is best described as Homeland Security per se; (b) the percentage (15.4%,  $n=8$ ) of college academic departments that located graduate homeland security curricula that were best described by research participants as Homeland Security per se; and (c) the percentage (19.2%,  $n=10$ ) of faculty whose academic background was best described by research participants as Homeland Security per se suggests that homeland security is evolving as an academic discipline. It appears

that a sizable number of colleges and academics are accepting and converting to homeland security in what Kuhn (1996) refers to as a new paradigm. This aligns with the research that suggests the emergence of homeland security as a new, emerging, and developing discipline (CHDS, 2008, 2011; Falkow, 2013; Palin, 2010; Recca, 2013; Supinski, 2012). Furthermore, the above findings coupled with similar findings regarding undergraduate homeland security curricula (Research question two) suggest that homeland security as an academic discipline has reached what Gladwell (2000) referred to as a *tipping point*, a critical mass of circumstances that set us on a new and unstoppable course.

Significant variances between the way colleges develop their undergraduate and graduate homeland security curricula are limited to the degrees that colleges categorize their undergraduate and graduate homeland security as Homeland Security and Emergency Management, Homeland Security and Criminal Justice, and Homeland Security per se. In the aggregate ( $n=112$ ), undergraduate ( $n=60$ ) and graduate ( $n=52$ ), the vast majority (71.4%,  $n=80$ ) of college homeland security curricula was categorized as either Homeland Security and Emergency Management (24.1%,  $n=27$ ), Homeland Security and Criminal Justice (20.5%,  $n=23$ ), or Homeland Security (26.8%,  $n=30$ ).

Homeland Security and Emergency Management curricula are more likely to be found in undergraduate programs,  $n=17$  (28.3%) participants report that their colleges' categorized their undergraduate homeland security curricula as Homeland Security and Emergency Management and  $n=10$  (19.2%) of participants report that their colleges categorize their graduate homeland security curricula as Homeland Security and Emergency Management.

Homeland Security and Criminal Justice curricula are slightly more likely to be found in undergraduate programs,  $n=13$  (21.7%) of participants report that their colleges categorize their undergraduate homeland security curricula as Homeland Security and Criminal Justice, and  $n=10$  (19.2%) of participants report that their colleges categorize their graduate homeland security curricula as Homeland Security and Criminal Justice. Conversely, Homeland Security curricula are more likely to be found in graduate programs;  $n=17$  (32.7%) report that their graduate homeland security curricula is categorized as Homeland Security, and  $n=13$  (21.7%) of participants report that their colleges categorize their undergraduate homeland security curricula as Homeland Security.

**Research question six.** How do colleges ensure that their graduate homeland security curricula remain current as homeland security needs change? Employing, McCune's (1986) curricula planning process, research question six focused on what colleges actually do to keep their graduate homeland security curricula current as homeland security needs change. The vast majority (78% or higher) review current academic and government literature and policy; solicit student input/feedback; conduct independent research; and attend conferences. The majority of colleges (51.9.7% or higher) review the UAPI website for new course material and convene focus groups. Study participants also report that their colleges' employ *other* means ranging from faculty are practitioners who maintain currency through training and networks, to the occurrence of regular curriculum reviews that are conducted with program sponsors.

Varied means were reported as *most important* with the largest percentages of research participants reporting that reviewing current government homeland security

policy directives and strategies (32.7%,  $n=17$ ), reviewing current homeland security academic literature (15.4%,  $n=8$ ), and conducting independent research (15.4%,  $n=8$ ) are the most important. Graduate homeland security curricula were modified to varying degrees since they were first offered with the vast majority (92.3%) being modified at least *somewhat*. Ostensibly, colleges are adapting their graduate homeland security curricula to meet the challenges of the dynamic and rapidly evolving homeland security threat landscape (Worldwide Threat Assessment, 2014; U.S. Department of Homeland Security, 2014a). There are no significant differences between the way colleges keep their undergraduate and graduate curricula current.

**Educating homeland security professionals.** Collier (2013) argued that it was time to recognize that the most recent approaches to undergraduate teaching and learning ensure graduates have the substantive knowledge and professional skills which were in the past mainly developed in graduate programs. Analyses of colleges' undergraduate and graduate homeland security curricula demonstrate that colleges are employing the same or similar processes to develop, categorize, and keep their curricula current and are offering the same or similar courses, albeit at different levels, as part of their undergraduate and graduate homeland security curricula. This raises the questions: what are the distinctions and purposes of undergraduate and graduate homeland security curricula?

Undergraduate education lends itself to the liberalizing of students. Graduate education lends itself to specialization, intensity, and preparing students for learned professions (Opperman, 2011). Gardner and Shulman (2005) found that physicians, lawyers, architects, and engineers are generally accepted as professionals. Nurses, social

workers, and teachers are generally considered to be professionals but less so than the aforementioned first tier. Several other practitioners may also have some claim to professional status. Professions are subject to their times, from the growing reach of new technologies to fiscal realities. Palin (2010) found that homeland security may be an emerging new profession. Claiming the core characteristics of a profession is how homeland security could best serve the public interest. Gardner and Shulman (2005) identified six characteristics of professionals:

- A commitment to serve in the interests of clients in particular and the welfare of society in general;
- A body of theory or specialized knowledge with its own principles of growth and reorganization;
- A specialized set of skills, practices, and performances unique to the profession;
- The developed capacity to render judgments with integrity under conditions of both technical and ethical uncertainty;
- An organized approach to learning from experience, both individually and collectively, and thus growing new bodies of knowledge from the context of practice, and;
- The development of a professional community responsible for the oversight and monitoring of quality in both practice and professional education.

Through their seminal homeland security curricula initiative, Pelfrey et al. (2002) identified 10 key disciplines that should be trained to respond to incidents involving weapons of mass destruction: emergency management agencies, emergency medical

services, firefighters, governmental administrators, hazardous materials personnel, law enforcement, public health, health care, public safety communications, and public works. Each of these disciplines is represented in the homeland security enterprise. All should be trained and educated to prevent/mitigate, prepare for, respond to, and help the nation recover from homeland security events that do occur. Each discipline, to varying degrees, fulfills Gardner and Shulman's (2005) professional criteria.

As members of the homeland security enterprise, practitioners at all levels may be faced with homeland security versions of what Krulak (1999) referred to as *three block wars* wherein *strategic corporals* make critical decisions that decide the outcomes. Three block wars are tactical engagements with strategic implications. *Strategic corporals* are entry-level and first-line supervisors that are trained to make critical decisions. The heroic and tactical actions and decisions made by numerous first responders during the events of Superstorm Sandy in 2012 and the Boston Marathon terror attacks in 2013 demonstrate clearly that members of the homeland security enterprise can, and do make critical decisions that decide the outcomes (U.S. Department of Homeland Security 2013a, 2013b, 2013c, 2014a, 2014b).

Homeland security's strategic corporals, entry-level and first-line supervisors, require the knowledge and professional skills that were once reserved for mid-level managers and executives. For most members of the homeland security enterprise, the requisite knowledge and skills and professionalization will come from organizational training and undergraduate education. As Pelfrey and Kelley (2013) suggest, graduate level homeland security education is designed for practitioners in leadership or administrative positions.

## Limitations

Despite efforts to minimize the gaps and limitations to this study, they did exist. This research obtained responses by surveying the entire population of UAPI members in the United States who were identified as faculty at a U.S. college. The Internet-based survey was administered to the entire population and that resulted in a voluntary return rate of  $n=86$  (14.6%). Although not uncommon for Internet-based surveys to have response rates of less than 20%, an increase on this study's return rate of 14.6% would provide a more representative sample (Witmer, Colman, & Katzaman, 1999). Moreover, the sample size ( $n=86$ ) did not lend itself to inferential statistics that might provide significant analyses of the relationships between variables and particularly between (a) faculty academic backgrounds, (b) colleges' regional locations, and (c) the year that colleges first developed their curricula with the development of the curricula.

The survey population was limited to a sample from a specific organization. Only faculty that were members of the UAPI were asked to take part in this study. Faculty was defined here as Professors, Associate Professors, Assistant Professors, Specialist Professors, Lecturers, Instructors, and Chairpersons (department), Program Coordinators, Directors, Managers, and Adjunct Professors. College administrators, consultants, coordinators, and learning management systems specialists are not included in this study.

The results of this study may be generalized on a larger scale. However, the researcher recommends that future surveys include college administrators and what Oliva and Gordon (2013) referred to as *curriculum workers* –curriculum planners, consultants, coordinators, and professors of curriculum as each may, to varying degrees, approve, modify, mold, shape, and tailor curricula (Oliva & Gordon, 2013).

## **Recommendations**

There is no consensus definition of homeland security (Bellavita, 2008; Reese, 2013, 2014) and no clear guidelines for colleges to develop, categorize, and ensure that their homeland security curricula remain current as homeland security needs change. The current homeland security threat environment (Worldwide Threat Assessment, 2014) merits undergraduate and graduate homeland security curricula that will provide students with the attitudes, values, beliefs, knowledge, skills, and abilities to secure the homeland. Recommendations resulting from this study include a national college homeland security conference, a national U.S. Homeland Security Academy, the establishment of a doctoral level graduate program at CHDS, and future research.

**National college homeland security conference.** Colleges that offer homeland security curricula should assemble to: (a) develop an academic definition of homeland security; (b) develop core and model undergraduate and graduate homeland security curricula; and (c) identify homeland security curricula *smart practices*. Smart practices are distinguished from best practices in that smart practices describe interesting ideas embedded in some practice, while best practices suggests that research and empirical evidence prove that the practices are best. Smart-practice research emphasizes that there is something clever inherent in a practice. It is this cleverness that the researcher must analyze, characterize in words, and appraise as to its applicability to the local situation (Bardach, 2009). See Collier (2013) for a similar recommendation of a homeland security college conclave.

Developing an academic definition of homeland security is a prerequisite to developing core and model homeland security curricula. A consensus definition of



homeland security might help to determine what has to be done to actually secure the homeland. See Smith (2005), Pelfrey and Pelfrey (2009), and Preston, Armstrong, and McCoy (2010) for foundational academic definitions of homeland security.

Core and model undergraduate and graduate homeland security curricula will provide colleges with clear guidelines to develop and keep their curricula current. The curricula should represent the combined sense of the homeland security enterprise. The conference should establish a working group to create a national survey that asks members of the enterprise to identify what attitudes, values, beliefs, knowledge, skills, and abilities are necessary to prepare homeland security practitioners for the current and future homeland security threat landscape. The curricula should be informed by the survey.

The conference should identify homeland security curricula instructional smart practices. The research (Polson, Persyn, & Cupp, 2010; Preston, Armstrong, & McCoy, 2010) showed that colleges were testing and implementing a wide range of homeland security curricular methods. Methods that demonstrate considerable value should be shared so that other colleges may adapt, scaled and measured to their unique needs, those curricular methods that might help prepare students for homeland security. See Pelfrey and Kelley (2013) for a similar recommendation. The academic definition of homeland security, the core and model homeland security curricula, and the smart practices should be made available to homeland security educators on the UAPI or other suitable website.

**U.S. homeland security academy.** The U.S. Homeland Security Academy would provide competitive, service-oriented education to homeland security aspirants. It would be modeled on the U.S. military academies that require service obligations.

Similar to the proposed Federal Homeland Security Undergraduate University (DiGiacomo, 2010) and the proposed U.S. Public Service Academy (House of Representatives Bill 1671, 2007; Senate Bill 960, 2007), students would earn credits toward a bachelors' degree. The curriculum would include homeland security related courses with a focus on leadership and civic and service-oriented education. Unlike U.S. military academies whose service obligations are U.S. military specific, the U.S. Homeland Security Academy would offer service opportunities at the federal, state, local, and tribal government levels. In addition, certain service opportunities would be available in the private sector. Considering the inclusion and recent emphasis on public-private partnerships within the homeland security enterprise (U.S. Department of Homeland Security, 2014), Academy graduates that satisfy their service commitment in the private sector would be serving the best interests of the homeland security enterprise. Private sector service commitments would, however, require explicit guidance and appropriate oversight.

**Doctoral level graduate program.** CHDS, with the support of Congress and DHS, should establish a doctoral level graduate program that will provide the homeland security enterprise with evidence-based research that helps prevent/mitigate threats and identify effective preparedness, response, and recovery capabilities and practices. CHDS' Out of the Classroom and Into the World program and Applied Research Exemplars (Center for Homeland Defense and Security, 2014e) provide rich examples of real-world applications of theory to practice. This study identified at least 13 homeland security related doctoral programs (Center for Homeland Defense and Security. 2014d). Each program, however, is grounded in other disciplines and especially criminal justice,

emergency management, public administration, and management. A doctoral program grounded in homeland security specifically and based upon the CHDS program Out of the Classroom and into the World would focus on homeland security specific problems. The doctoral program would develop and test theories that explain and predict phenomena, and apply new knowledge to critical concerns.

**Additional research.** The homeland security curricula process is inherently complex, variant, ramified, and not always transparent. Therefore, the study's survey did not capture all possible elements of college homeland security curricula and further research is warranted. This research did not identify experiential and research elements of homeland security curricula. Each may play a significant role in the curricula process and are worthy of future research. Although this study's survey afforded participants the opportunity to provide *other* answers and comments, the quantitative methodology did not allow for follow-up questions that may have provided greater insights. Future iterations of this study or other college homeland security curricula surveys should consider follow up qualitative interviews of willing participants.

## **Conclusion**

The American people have come to value the set of activities that comprise homeland security. Prevention, preparedness, response, mitigation, recovery, and consequence management activities significantly contribute to quality of life. Once aspirational goals, they are now expectations, if not requirements. Education is a potent and durable contributor to enhancing homeland security (Pelfrey & Kelley, 2013). Education is one of the most optimistic endeavors of mankind. At the core of education is curriculum.

This study focused on the policies and practices that colleges use to develop, categorize, and ensure that their homeland security curricula remain current as homeland security needs change. The means to do so were variant, ramified, and not always transparent. The study used a quantitative Internet-based survey issued to faculty at colleges that offered homeland security curricula. All faculty were members of the CHDS University Agency Partnership Initiative (UAPI). The survey asked participants to provide demographic data, and to respond to questions related to the development, categorization, and ensuring that college homeland security curricula remain current as homeland security needs change. The survey instrument was developed using the research on the literature including policies and practices in use by colleges in the United States.

As this was a new survey instrument, validity and reliability was established prior to use. To establish validity and reliability a panel of four homeland security higher education faculty members was used. The panel were given the initial survey as a pre-test and requested to evaluate the questions for validity and construct. The panelists then returned the survey with written comments. The panel's responses and comments were reviewed and incorporated into a corrected survey. The test surveys were distributed to the panelists in the same manner as the actual research participants to simulate actual research conditions. The panelists were asked to complete the survey and to return it electronically via Qualtrics an online survey tool. The data from this test survey were analyzed and this revealed that the survey was mechanically sound. The survey was redistributed to the same panel for retest and finalization of the survey. A test-retest analysis (*Test-1* and *Test-2*) revealed test-retest reliability.

After establishing reliability and validity, the Internet-based survey was issued to the research participants, 587 faculty members at colleges in the United States that offered homeland security curricula. All participants were also registered UAPI members, an organization for homeland security educators and agencies. The survey responses were returned electronically at a return rate of 14.6%. An analysis of the response data was conducted using data analysis software. Descriptive statistics and analysis of the quantitative data were used to assess the research questions and the demographic data.

The analysis of the data determined that colleges use varied means to develop their undergraduate and graduate homeland security curricula. The majority (50.9% or higher) of colleges employ focus groups/advisory councils and adopt/modify CHDS materials, and 38% or higher adopt/modify preexisting courses from their institutions, UAPI (other than CHDS), and DHS course materials. Colleges use various means to deliver their homeland security curricula with the vast majority (79.5%) delivering at least part of the curricula on-line.

Colleges use various names to categorize their undergraduate and graduate curricula. The vast majority (71.4%) categorize the curricula as Homeland Security per se (26.8%), Homeland Security and Emergency Management (24.1%), or Homeland Security and Criminal Justice (20.5%). The vast majority (83%) of colleges' approach to undergraduate and graduate curricula is multidisciplinary/interdisciplinary rather than unidisciplinary.

Colleges use multiple and varied means to keep their undergraduate and graduate homeland security curricula current. The vast majority (75% or higher) review current

academic and government literature and policy, solicit student input/feedback, review UAPI website for new course material, and conduct independent research. College undergraduate and graduate homeland security curricula are modified to varying degrees with the vast majority (85.7%) being modified at least somewhat since they were first offered.

The research participants drawn from the UAPI website were limited to faculty. Further research on a larger scale will increase the generalizability of these results. It is recommended that further studies include other curriculum workers as their roles in the curricula process might provide further insights.

The recommendations resulting from this study include a national college homeland security conference, a national U.S. Homeland Security Academy, the establishment of a doctoral level homeland security program at CHDS, and future research. Colleges are an integral component of the homeland security enterprise. Common and core college homeland security curricula can, and must effectively prepare current and future members of the enterprise to provide a homeland that is safe, secure, and resilient.

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**Appendix A**  
**Homeland Security Definitions**

<b>DOCUMENT</b>	<b>YEAR</b>	<b>AUTHOR</b>	<b>DEFINITION</b>
<i>National Strategy for Homeland</i>	2007	White House	A concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur.
<i>One Team, One Mission, Securing Our Homeland: U.S. Homeland Security Plan, Fiscal Years 2008-2013</i>	2008	Department of Homeland Security	A unified national effort to prevent and deter terrorist attacks, protect and respond to hazards, and to secure the national borders.
<i>National Security Strategy</i>	2010	White House	A seamless coordination among federal, state, and local governments to prevent, protect against and respond to threats and natural disasters.
<i>Quadrennial Homeland Security Review</i>	2010	Department of Homeland Security	A homeland that is safe, secure, and resilient against terrorism and other hazards where American interests, aspirations, and ways of life can thrive.
<i>Quadrennial Homeland Security Review</i>	2014	Department of Homeland Security	Same as above. *2014 QHSR affirms the 2010 QHSR definition
<i>Bottom-Up Review</i>	2010	Department of Homeland Security	Preventing terrorism, responding to and recovering from natural disasters, customs revenue, and administration of legal immigration services, safety and stewardship of the Nation's waterways and marine transportation system, as well as other legacy missions of the various components of DHS
<i>National Strategy for Counterterrorism</i>	2011	White House	Defensive efforts to counter terrorist threats
<i>Strategic Plan: Fiscal Years 2012-2016</i>	2012	Department of Homeland Security	Efforts to ensure a homeland that is safe, secure, and resilient against terrorism and other hazards
<i>Joint publication 3-28: Defense Support of Civil Authorities</i>	2013	Department of Defense	A concerted national effort to prevent terrorist attacks within the United States; reduce America's vulnerability to terrorism, major disasters, and other emergencies; and minimize the damage and recover from attacks, major disasters, and other emergencies that do occur. HS is an integral element of a broader US national security

			domestic policy. Protecting the U.S. from terrorism is the cornerstone of HS.
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\*Adapted from Reese (2013) Table 2. Summary of Homeland Security Definitions

## **Appendix B**

### **Topics That Come Under the Rubric of Homeland Security**

1. Threats to the homeland
2. Risk management and analysis
3. Critical infrastructure protection
4. Laws related to homeland security
5. Homeland security policies & strategies
6. Responses to terrorism
7. Terrorism
8. Intelligence
9. Overview of Homeland Security Mission Areas
10. Organization of homeland security
11. Sociology of homeland security (e.g. politics, roles, behavior, power, conflict, communication)
12. Systems integration and administration of homeland security
13. Border security
14. Cyber security
15. History of homeland security and terrorism
16. Strategic planning & budgeting
17. Civilian & military relationships
18. Comparative & international homeland security
19. Federal role in homeland security
20. Future of homeland security
21. Preparedness
22. Private sector role in homeland security
23. Public health & medical issues
24. Role of state and local governments
25. Homeland security technology
26. Weapons of mass destruction
27. Critical thinking
28. Federalism
29. Strategic communications
30. Transportation security
31. Basics of homeland security
32. Civil liberties
33. Decision making
34. Ethical issues
35. Interagency coordination
36. Leadership
37. Media
38. Politics of homeland security
39. Prevention of terrorism
40. Psychology of homeland security
41. Recovery after an attack
42. Risk communications
43. Utilities and industrial facilities security
44. Emergency management
45. Engineering
46. Exercises and training
47. Geospatial dimensions of homeland security
48. Human resource management (continued)
49. Modeling & simulation

- 50. Role of communities in homeland security
- 51. Role of individuals in homeland security

(Source: Bellavita & Gordon, 2006)

## **Appendix C**

### **Twelve Homeland Security Competency Domains**

1. The historical forces that spurred the changes in U.S. strategy, policy, and organization design since September 11, 2001.
2. The logic, strategies, methods, and consequences of terrorism.
3. Public information, crisis communications, and managing the fear terrorist try to create.
4. Conventional and unconventional threats to homeland security (e.g. borders, transportation, agriculture, health, ports), particularly the vulnerabilities of the nation's critical infrastructure.
5. The strategic leadership challenges and skills demanded by the continuously changing multi-agency, multidisciplinary collaborative environment –e.g., public agencies, military agencies and the private sector
6. The science and technology of weapons of mass destruction, weapon of mass exposure, and weapons of mass effects.
7. The lessons learned from other nations and from history about preventing and responding to terrorism.
8. The relationship between forms of government and social organization, and the cause, consequences and response to terrorism.
9. The dynamic tension the war on terrorism triggers between the criminal justice system and the Constitution –this is the civil liberties issue.
10. The sources, methods and uses of homeland security information and intelligence, especially in an environment where many public agencies, private agencies, and the military have acknowledged the new imperative to work collaboratively.
11. The use and limits of technology in homeland security.
12. The analytical, planning, budgetary and fiscal frameworks that can assist homeland security leaders design effective policies and strategies for the myriad substantive issues that constitute homeland security.

(Source: Bellavita and Gordon, 2006)

**Appendix D**  
**Center for Homeland Defense and Security Graduate Curriculum 2003**

- Introduction to Homeland Security (National Security 3180)
- Introduction to Comparative Government (NS 3028)
- Introduction to Civil-Military Relations (NS 3027)
- Information Technology Management for Homeland Security (IS 4012)
- Policy Analysis and Research Methods (NS 2011)
- Asymmetric Conflict and Homeland Security (SO 3210)
- Critical Infrastructure Protection (CS 3660)
- Strategic Planning and Budgeting For Homeland Security (NS 4755)
- Law Enforcement and Judicial System Issues in Homeland Security (NS 4881)
- Intelligence for Homeland Security: Organizational and Policy Challenges (NS 4156)
- The Psychology of Fear Management and Terrorism (NS 4133)
- Introduction to WMD (NS 4233)
- Financing Terrorism (NS 4231)
- Research Colloquium (NS 4081)

(Source: Pelfrey & Pelfrey, 2009)



**Appendix E**  
**Center for Homeland Defense and Security's Masters' Program Curriculum**

- Introduction to Homeland Security (NS 3180)
- The Unconventional Threat to Homeland Security (DA 3210)
- Research and Writing for Homeland Security (NS 2013)
- Intelligence for Homeland Security: Organizational and Policy Challenges (NS 4156)
- Technology for Homeland Security (IS 4010)
- Research Colloquium (NS 4081)
- Critical Infrastructure Protection: Vulnerability Analysis and Protection (CS 3660)
- Special Topics in American Government for Homeland Security: "Framing the Discourse" (NS 4239)
- Multi-discipline Approach to Homeland Security (NS 4881)
- Comparative Government for Homeland Security (NS 3028)
- Strategic Planning and Budgeting for Homeland Security (NS 4755)
- The Psychology of Fear Management and Terrorism (NS 4133)
- Knowledge into Practice: A Homeland Security Capstone Course (NS 4232)

(Source: Center for Homeland Defense and Security, *n.d.*)

**Appendix F**  
**Center for Homeland Defense and Security**  
**Undergraduate Course Recommendations**

1. Administering homeland security
2. Intelligence
3. Public and private sector partnerships
4. Research and analysis
5. Emergency management
6. Critical infrastructure (and its protection)
7. Strategic Planning
8. Strategic communications
9. Law and policy
10. Technology and systems
11. Terrorism causes and consequences

(Source: Center for Homeland Defense and Security, 2009)

**Appendix G**  
**Graduate Homeland Security Recommended Content Areas**

1. Current and Emerging Threats
2. Context and Organization
3. Policies, Strategies, and Legal Issues
4. Processes and Management
5. Practical application

(Source: Homeland Defense and Education Consortium, 2005)

**Appendix H**  
**Core Competencies for Undergraduate Degree Programs**

- Intelligence
- Law & policy
- Emergency management
- Risk management
- Critical infrastructure & key resources
- Strategic planning
- Terrorism
- Strategic communications

(Source: Homeland Defense and Security Education Association, 2009b)

**Appendix I**  
**Core Competencies for Graduate Degree Programs**

- Intelligence
- Strategic communication
- Terrorism
- Critical infrastructure and key resources
- Emergency management
- Strategic planning
- Law and policy
- Risk analysis

(Source: Homeland Defense and Security Education Association, 2009d)

**Appendix J**  
**Core Elements of a HLS Strategic Studies Program**

1. Business processes and management issues
2. Legal issues
3. Human resource management
4. Technology management for homeland security
5. Strategic communications
6. Risk management
7. Government
8. Strategic planning, programming and budgeting
9. Emergency management
10. Human behavior and social dynamics (*Government, Public and Terrorists*)
11. Intelligence for homeland security
12. Hazards, vulnerabilities, and risk assessment
13. Decision-making and critical thinking
14. Multiple domain integration
15. International dimensions of HS

(Source: Charting a Course for Homeland Security Studies Conference, 2005)

**Appendix K**  
**Educational Objectives for an**  
**Undergraduate Degree in Homeland Security**

**EO 1**

Instill in our graduates skills, knowledge and abilities appropriate to the profession of homeland security.

**EO 2**

Infuse each graduate with a desire to be a lifelong learner and to pursue subsequent degrees or other professional certificates appropriate to the profession of homeland security.

**EO 3**

Instill an appreciation of one's civic duties and responsibilities to society.

(Source: Ramsay, Cutrer, & Raffel, 2010)

**Appendix L**  
**General Program Outcomes for an Undergraduate Degree in**  
**Homeland Security**

**GO 1**

Apply homeland security concepts in a non-academic setting through an internship, cooperative, or supervised experience to include real-world experiences, strategies, and objectives.

**GO2**

Gain an understanding of professional ethics and how they apply in the field of homeland security.

**GO 3**

Demonstrate the capability to utilize and evaluate analytical data applicable to homeland security.

**GO 4**

Demonstrate the ability to conduct research, compose a research paper, and deliver professional presentations and briefings in order to develop and refine analytical abilities.

**GO 5**

Identify, describe, and critically evaluate applicable homeland security technologies.

**GO 6**

Ability to demonstrate effective communication; especially in ways applicable to homeland security (e.g., policy analysis, briefings, strategic or risk communications, etc.)

**GO 7**

Demonstrate the ability to work in teams.

**GO 8**

Demonstrate knowledge of contemporary or emergent threats, challenges, or issues.

(Source: Ramsay, Cutrer, & Raffel, 2010)



## Appendix M

### Core Academic Areas & Student Learning Outcomes (1/2)

Core Academic Areas and their Associated Student Learning Outcomes		
	Core Area & Definition	Associated outcomes – Each student will possess a demonstrated ability to or knowledge of:
CA 1	<i>Intelligence - A systematic process of collection, analysis, and dissemination of information in support of national, state, and/or local policy or strategy.</i>	1) The intelligence and counter-intelligence concepts, to include the collection, analysis, and dissemination of intelligence data both within the US and internationally. 2) The organization and mission of the federal Intelligence Community, state and local intelligence agencies within the US, private/corporate sector intelligence efforts, and selected components globally. 3) Synthesize fundamental intelligence concepts while understanding their variables, limitations, and shortcomings.
CA 2	<i>Law &amp; Policy - Legal and policy formulations that provide the basic direction of homeland security means and objectives and establish a context for homeland security within the broader purview of national security.</i>	4) Legal and constitutional principles and their application in the area of Homeland or National Security law and policy. 5) Case law, precedential, and court decisions relating to and having an effect upon homeland security policy and law.
CA 3	<i>Emergency Management - The process of coordinating available resources to deal with emergencies effectively, thereby saving lives, avoiding injury or illness, and minimizing economic losses. This protection process involves four phases that are reinforcing and mutually dependent: preparedness, response, mitigation, and recovery.</i>	6) Emergency management and response concepts, phases, and procedures across the range of homeland security challenges. 7) Entry-level emergency operations, training and exercises, to include all levels of emergency management exercises.
CA 4	<i>Risk Analysis - A systematic method of identifying the assets (e.g., critical infrastructure and key assets) of a system, the threats (i.e., strategic, political, economic, technological, or cultural) to those assets, and the vulnerability of the system to those threats in such a way as to be able to quantify threats and their consequences to a system for the purpose of developing appropriate countermeasures.</i>	8) Risk analysis principles, processes, and techniques, in both the public and private sectors. This includes knowledge of an all hazards approach to risk analysis and infrastructure protection. 9) Threat, vulnerability, consequence, and critical infrastructure analysis. 10) Basic industrial security principles.

## Appendix M

### Core Academic Areas & Student Learning Outcomes (2/2)

CA 5	<p><b>Critical Infrastructure</b> - <i>Systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of these assets.</i></p>	<p>11) The evolution and basic principles of critical infrastructure, in both the private and public sectors vital to their community, state or the nation.</p> <p>12) Identify critical infrastructure and key assets, and apply appropriate counter measures using a risk-based methodology.</p> <p>13) Compare and contrast private sector and governmental responsibilities in the area of critical infrastructure/key asset identification and protection.</p>
CA 6	<p><b>Strategic Planning</b> - <i>the process of defining an organization's strategy (a long term plan of action designed to achieve a particular goal or objective) or direction and making decisions on allocating its resources to pursue this strategy, including its capital, its technology and its human resources.</i></p>	<p>14) Applicable national strategies and plans, including their history, inter-relationships, similarities and differences.</p> <p>15) The strategic planning interface between national, state, and local governments.</p> <p>16) Basic principles underlying strategic planning, and identify these principles as they apply to the national strategy for homeland security.</p>
CA 7	<p><b>Terrorism</b> - <i>The threat of violence, individual acts of violence, or a campaign of violence designed primarily to instill fear. Terrorism is violence for effect: not only and sometimes not at all for the effect on the actual victims of the terrorists' cause. Fear is the intended effect, not the by-product of terrorism.</i></p>	<p>17) The history and basic concepts of global terrorism to include groups, ideologies, and underlying causes.</p> <p>18) Specific types of terrorism (e.g., state-supported, transnational, domestic, international) including their similarities and differences.</p> <p>19) The conceptual aspects of counter-terrorism, counter-terrorist activities, and outcomes and be able to identify and describe examples of these concepts.</p>
CA 8	<p><b>Environmental Security</b> - <i>a process for effectively responding to changing environmental conditions that have the potential to destabilize the political economy or governmental infrastructure of a nation or region which reduces peace and stability and thereby affects US national security.</i></p>	<p>20) Basic environmental health principles to include: geochemical cycling, population dynamics, aspects of air, water and land use, food production, environmental economics, and the human impact on the environment.</p> <p>21) Destabilizing influences and potential security implications from anthropogenic causes, climate change, natural disasters, and hazards.</p>

(Source: Ramsay, Cutrer, & Raffel, 2010)

**Appendix N**  
**Homeland Security Curriculum Subject Areas**

**Introduction to Homeland Security**

1. History

**Fusion/Intelligence**

2. Information Sharing

**Technology**

3. Intelligence

**Security Issues**

4. Homeland Security
5. National Infrastructure Protection Plan

**Threat Analysis**

6. Vulnerability

**Emergency Management**

7. National Strategy
8. National Response Framework Plan

**Risk Management**

9. Psychology of Terrorism
10. Disaster Response and Recovery

**Training and Development**

11. Information Management
12. Surveillance Detection
13. Exercises and Evaluation Program

(Source: Travis and Bradshaw, 2012)

**Appendix O**  
**Eastern Kentucky Bachelor of Science in Homeland Security Curriculum**

Table II EKU Homeland Security Curriculum

Homeland Security Policy/Legal/Management

- Introduction to Homeland Security
- Homeland Security Colloquium (Capstone)
- U.S. History from 1877\*
- American Government
- Psychology\*
- Principles of Management\* or Introduction to Public Administration\*
- Border & immigration Control (Special Topics elective)
- Homeland Defense (Special Topics elective)
- Maritime Security

Critical Infrastructure Protection

- Physical Security\*
- Critical Infrastructure Protection
- Vulnerability and Risk Assessment
- HLS Technology
- Cyber Security (elective)
- Several Special Topics (electives) on CI sectors/subsectors

Research/Analysis/Intelligence

- Critical Problem Analysis
- Statistics\*
- Intelligence Process
- Geographic Information Systems\*
- Terrorism/Counterterrorism\*
- Counterintelligence (elective)
- Domestic Terrorism (elective)

Emergency Management

- Emergency Management (introduction)
- Disaster Preparedness and Response
- Mitigation and Disaster Recovery
- WMD\Hazardous Materials\*
- Disaster Medical Operations\*
- Introduction to Physical Geography \* or Earth Science\*
- Emergency Planning (elective)
- Business Continuity and Emergency management (elective)
- Modern Natural Disasters (elective)

Miscellaneous Electives

- Cooperative Education/Internships
- Field Experience
- Independent Study

\*supporting courses taught by programs outside homeland security

(Source: Collier, 2012)

**Appendix P**  
**Department of Defense Homeland Defense and Security Core Competencies**

- Ethics
- Collaboration
- Communication
- Creative and critical thinking
- Cultural awareness
- Strategic leadership
- Management and planning skills
- Adaptability
- Crisis management
- Critical expertise
- Science/technology expertise
- Risk management

(Source: Verga, 2007, November 14)

## Appendix Q

### Core Common Areas, HSDEC Content Areas, and DOD Competencies

HSDEC Content Areas	Workshop Core Common Areas	DoD Core Competencies
Content Area 1 Current and Emerging Threats	Historical aspects of domestic incidents	Critical expertise
	Human factors and psychology of domestic incidents, sociology, needs of people (resiliency)	Cultural Awareness
	Understand and identify characteristics of domestic threats (manmade and natural; accidental and purposeful) and hazards (chemical, biological, natural, terrorism, domestic threats, etc.)	Risk Management
Content Area 2 Context and Organization	Policy, roles, and responsibilities at National, Tribal, State and Local organizational levels (including preparation, preparedness/ protection, response, and recovery)	Critical expertise
	Policy, roles, and responsibilities of non-profits, volunteers, and private sectors (within crisis continuum preparation, preparedness/ protection, response, and recovery)	Critical expertise
	Common language, understand and learn acronyms, TEN code common terms, Homeland Security terminology	Communication
	Role of military in domestic incidents	Critical expertise Crisis Management
Content Area 3 Policies, Strategies, Legal Issues	Core focus on state and local level structures	Critical expertise
	Legal aspects of domestic incidents	Ethics
Content Area 4 Processes and Management	Common national plan and emergency systems (National Response Framework (NRF) and National Incident Management System (NIMS))	Collaboration
	Border and transportation security	Critical expertise
	Infrastructure protection, critical infrastructure and impact on homeland functions	Science and Technology Expertise
	Understand and identify assets for use in domestic incidents	Management and Planning Skills
Content Area 5 Practical Application	Leadership in crisis situations from the local, state, tribal, and federal levels (communication with the public)	Strategic Leadership
	Exercises, training, practicum as part of course (Table Top Exercise, training scenario, vignette-based practical exercise)	Adaptability Creative and Critical Thinking

(Source: Polson, Persyn, & Cupp, 2010)

**Appendix R**  
**Colorado Technical University Doctorate in Management**  
**with a Concentration in Homeland Security**

- Fundamentals of Management (With Homeland Security Emphasis)
- Research Methods and Design (With Homeland Security Emphasis)
- Qualitative and Ethnographic Methods (With Homeland Security Emphasis)
- Quantitative Methods (With Homeland Security Emphasis)
- Process Consulting and Intervention Theory (With Homeland Security Emphasis)
- The Practice of Action Research (With Homeland Security Emphasis)
- Contemporary Issues in Homeland Security
- Network Organization and Other Large Scale Interventions for Homeland Security
- Crisis Operations Management
- Policy and Governance for Trans-organizational Collaboration
- Leadership (With Home Land Security Emphasis)
- Strategic Thinking for Homeland Security
- Futuring and Innovation in Homeland Security

(Source: Preston, Armstrong, & McCoy, 2010)

**Appendix S**  
**Critical Trends within the Homeland Security Enterprise**

1. Cyber security
2. Long-term disaster recovery\resilience
3. Immigration and global demographic flows
4. Climate change
5. Trade and supply chain security
6. Demands on global natural resources
7. Emerging technologies
8. WMD proliferation
9. Extremist ideologies and terrorism
10. Public health threats
11. Lone wolf/Active shooter threats
12. Organizational/budgetary issues
13. Transnational crime
14. Critical infrastructure protection
15. Merging of homeland security and national security
16. Public-Private partnership
17. Homeland security theory
18. Big data and complexity

(Source: Center for Homeland Defense and Security, Future Advisory Committee, 2013)



## **Appendix T**

### **Informed Consent Form**

#### I. Informed Consent

You are requested to consider participating in a research study conducted by John G. Comiskey for a dissertation under the supervision of Dr. Richard Maurer of the Department of Education at St. John Fisher College. You are asked to participate because you were identified as a faculty member at a U.S. college/university that offers an undergraduate/graduate homeland security curriculum.

For ease of use, the term college will represent both colleges and universities.

For the purposes of this study, college faculty includes: Professor, Associate Professor, Assistant Professor, Specialist Professor, Lecturer, Instructor, Chairperson (department), and Program Coordinator/Director/Manager and Adjunct Professor. Associate/assistant positions as in Associate Chair are also included.

In this study, homeland security college faculty receive an internet-based survey designed to obtain information about how colleges develop, categorize, and ensure that their homeland security curriculum remain current.

Please read this form carefully and ask any questions you may have before deciding whether to participate.

This study will survey college homeland security program faculty to determine how their colleges prepare students for homeland security.

A current survey of college homeland security faculty will help identify national and/or regional homeland security educational requirements that will help colleges develop appropriate homeland security curriculum that will prepare students for homeland security.

If you agree to participate in the study, you will be asked to complete an on-line survey that will take approximately **15-20** minutes to complete. The survey is designed to gather information on how your college developed, categorized, and ensured that its homeland security curriculum remained current.

Upon request, the researcher will share all survey data with survey respondents.

This study for education purposes uses human research participants and is subject to ethical and legal guidelines. The structure and content for this research study, the survey instrument, was submitted and approved by St. John Fisher College's Institutional Review Board for research approval. There are no risks involved in participating in this research. All information gathered in this study will remain anonymous. No data will be released

identifying participants or their schools. All research will be conducted with the highest ethical standards for anonymity.

Your rights under this study are:

1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate
2. Withdraw from participation at any time without penalty
3. Refuse to answer a particular question without penalty
4. Be informed of appropriate alternative procedures or courses of treatment, if any that may be advantageous to you
5. Be informed of the results of the study

If you have any questions regarding this study, please contact the researcher, John G. Comiskey at [jcomiske@monmouth.edu](mailto:jcomiske@monmouth.edu)

**Please fill in the circle below to participate in the study:**

- |   |
|---|
| <p><input type="radio"/> I have read the informed consent section for the above-named study and agree and consent to participate in the survey.</p> |
|---|

## Appendix U Survey Questions

### A. Greeting

1. Which of the following **best** describes your position at your college:
  - Full-time faculty (Professor, Assistant Professor, Associate Professor, Specialist Professor, Lecturer, Instructor, Chairperson, Program Director/Coordinator/Manager)
  - Part-time faculty (adjunct)
  - Other (Please specify)* \_\_\_\_\_

\*If you are employed by more than one college, identify your position at the college you consider to be your primary college employer.

[Full-time or Part Time > Question #2; Other => End of survey]

2. How would you describe your **involvement** in the development, categorization, and keeping your colleges' homeland security curricula current?
  - Very involved
  - Somewhat involved
  - Not too involved
  - Not at all involved

[very or somewhat or not too =Block 3; Not at all involved = > End of Survey]

### B. Does your college have an undergraduate and/or graduate homeland security curriculum?

3. What level(s) of homeland security college degrees and/or certificates does your college offer? (*Please choose all that apply. You will be directed to a separate questionnaire for each level that you circle.*)
  - [a] Undergraduate (includes associates and bachelor degrees and/or certificates)  
[Y > Blocks IV-VI; N > 1b]
  - [b] Graduate (includes masters and doctoral degrees and/or certificates)  
[Y > Blocks VII-IX; N > Block X]

\*Blocks IV-VI and VII-VIII represent undergraduate and graduate questionnaires respectively. The undergraduate and graduate questionnaires are each represented by three blocks that distinguish subsections: (1) developing; (2) categorizing; and (3) keeping HLS curricula current.

### C. Developing Undergraduate Homeland Security Curricula

#### 4. How did your college **develop** its undergraduate homeland security curriculum?

\*If your college offered more than one undergraduate homeland security curricula (multiple degrees and/or certificates), answer the below questions based upon how your college developed its **principal** undergraduate homeland security curriculum (program that has the most students).

[Yes/No]

- a. Did your college adopt/modify Center for Homeland Defense and Security (CHDS) course materials? ○ ○
- b. Did your college adopt/modify University and Agency Partnership Initiative's (UAPI) course materials (other than CHDS materials)? ○ ○
- c. Did your college adopt/modify Department of Homeland Security (DHS) course materials (any DHS agency) ○ ○
- d. Did your college adopt/modify Department of Defense (DOD) course materials (any DOD agency/military branch)? ○ ○
- e. Did your college adopt/modify pre-existing course materials from the department that houses its homeland security program? ○ ○
- f. Did your college adopt/modify course materials from departments other than the department that houses its homeland security program? ○ ○
- g. Did your college employ a focus group/advisory council? ○ ○
- h. Did your college employ an accreditation agency/process? ○ ○
- i. *Other (Please specify)* \_\_\_\_\_ ○ ○

#### 5. How important were each of the following in the development of your colleges' undergraduate homeland security curriculum?

[a-i will display only if survey participant answered Y for corresponding question in question #2]

- a. Center for Homeland Defense and Security (CHDS) course materials ○ ○ ○ ○
- b. University and Agency Partnership Initiative's (UAPI) course materials (other than CHDS materials) ○ ○ ○ ○
- c. Department of Homeland Security (DHS) course materials (any DHS agency) ○ ○ ○ ○
- d. Department of Defense (DOD) course materials (any DOD agency/military branch) ○ ○ ○ ○
- e. Pre-existing course materials from the department that houses your college's homeland security program ○ ○ ○ ○
- f. Course materials from departments other than the department that houses your college's homeland security program ○ ○ ○ ○
- g. Focus group /advisory council ○ ○ ○ ○
- h. Accreditation agency/process ○ ○ ○ ○
- i. *Other (Please specify)* [answer from #4i. if applicable] ○ ○ ○ ○
  - very important
  - somewhat important
  - not too important
  - not at all important

6. Which of the following **most** influenced the development of your colleges' undergraduate homeland security curriculum?
- [a-i will display only if survey participant answered Y for corresponding question in question #2]
- Center for Homeland Defense and Security (CHDS) course materials
  - University and Agency Partnership Initiative's (UAPI) course materials (other than CHDS materials)
  - Department of Homeland Security (DHS) course materials (any DHS agency)
  - Department of Defense (DOD) course materials (any DOD agency/military branch)
  - Pre-existing course materials from the department that houses its homeland security program
  - Course materials from departments other than the department that houses its homeland security program
  - Focus group/advisory council
  - Accreditation agency/process
  - *Other (Please specify)* [answer from #4i. if applicable]
7. Which of the following **best** describes the **program delivery** of your college's undergraduate homeland security curriculum?
- Traditional classroom (face-to-face)
  - On-line
  - Blended (Hybrid: Traditional classroom and on-line)
  - Mixture of Traditional, On-line, and Blended
8. Please add any comments regarding the development of your colleges' undergraduate homeland security curriculum that were not covered in this survey that you feel are beneficial to this study.

#### D. Categorizing Undergraduate Homeland Security Curricula

9. Which of the following best describes how your college **categorized** (labeled) its undergraduate homeland security curriculum?

\*If your college offered more than one undergraduate homeland security curricula (multiple degrees and/or certificates), check the box that best describes your college's **principal** undergraduate homeland security curriculum (program that has the most students).

- Homeland Security and Criminal Justice
- Homeland Security and Cyber Security/Information Technology
- Homeland Security and Emergency Management
- Homeland Security and Emergency Medical Services
- Homeland Security and Fire Science
- Homeland Security
- Homeland Security and Intelligence
- Homeland Security and National Security Affairs/International Affairs
- Homeland Security and Public Administration/Public Policy
- Homeland Security and Public Health
- Homeland Security and *Other (Please specify)* \_\_\_\_\_

10. How important were each of the following in determining the categorization of your colleges' undergraduate homeland security curriculum?

- Department that houses undergraduate homeland security curricula input ○ ○ ○ ○
- College administration input ○ ○ ○ ○
  - very important
  - somewhat important
  - not too important
  - not at all important

11. Which of the following **best** describes your college's undergraduate homeland security curriculum?

- Single-discipline (curriculum focus is on a single discipline)
- Multi-disciplinary (curriculum includes multiple perspectives and disciplines)
- Inter-disciplinary (curriculum integrates multiple perspectives and disciplines)

12. Does your college's undergraduate homeland security curriculum include the following **topics**?

- |  | [Yes/ no] |
|--|-----------|
| a. All-hazards                                     | ○ ○       |
| b. Collaboration                                   | ○ ○       |
| c. Critical Thinking                               | ○ ○       |
| d. Critical Infrastructure                         | ○ ○       |
| e. Cyber Security/Information Technology           | ○ ○       |
| f. Emergency Management                            | ○ ○       |
| g. Emergency Medical Services                      | ○ ○       |
| h. Fire Science                                    | ○ ○       |
| i. Immigration                                     | ○ ○       |
| j. Intelligence                                    | ○ ○       |
| k. Law   | ○ ○       |
| l. Mapping (Geographical Information Systems)      | ○ ○       |
| m. National Security Affairs/International Affairs | ○ ○       |
| n. Preparedness                                    | ○ ○       |
| o. Public Administration/Public Policy             | ○ ○       |
| p. Public Health                                   | ○ ○       |
| q. Resilience                                      | ○ ○       |
| r. Risk Management                                 | ○ ○       |
| s. Strategy  | ○ ○       |
| t. Terrorism                                       | ○ ○       |
| u. <i>Other (Please Specify)</i> _____             | ○ ○       |

13. Please add any comments regarding the categorization of your colleges' undergraduate homeland security curriculum that were not covered in this survey that you feel are beneficial to this study.

#### E. Keeping Undergraduate Homeland Security Curricula Current

14. How does your college **keep its undergraduate homeland security curriculum current** as homeland security needs change?

If your college offered more than one undergraduate homeland security curricula (multiple degrees and/or certificates), answer the following questions based upon how your college keeps its **principal** undergraduate homeland security curriculum current (program that has the most students).

- |   | [Yes/No] |
|---|----------|
| a. Faculty review UAPI website for new and updated course material                      | ○ ○      |
| b. Faculty review current government homeland security policy directives and strategies | ○ ○      |
| c. Faculty review current homeland security academic literature                         | ○ ○      |
| d. Faculty attends national homeland security conferences                               | ○ ○      |
| e. Faculty convenes focus group/advisory councils                                       | ○ ○      |
| f. Faculty conducts independent research  | ○ ○      |
| g. Faculty solicits student input/feedback  | ○ ○      |
| h. <i>Other (Please specify)</i> _____  | ○ ○      |

15. Which of the following was the **most important** factor in how your college **kept its undergraduate curriculum** current?
- Faculty reviewed UAPI website for new and updated course material
  - Faculty reviewed current government homeland security policy directives and strategies
  - Faculty reviewed current homeland security academic literature
  - Faculty attended national homeland security conferences
  - Faculty convened focus group/advisory councils
  - Faculty conducted independent research
  - Faculty solicited student input/feedback
  - Other (Please specify)* \_\_\_\_\_ [answer from #14h (if applicable)]
16. Since your college first offered its undergraduate homeland security curriculum, how much has the curriculum been modified?
- A lot
  - Somewhat
  - Just a little
  - Not at all
17. Please add any comments regarding how your colleges keeps its undergraduate homeland security curriculum current that were not covered in this survey that you feel are beneficial to this study.

#### F. Developing Graduate Homeland Security Curricula

18. How did your college **develop** its graduate homeland security curriculum?

\*If your college offered more than one graduate homeland security curricula (multiple degrees and/or certificates), answer the below questions based upon how your college developed its **principal** graduate homeland security curriculum (program that has the most students).

- |   |          |
|---|----------|
|   | [Yes/No] |
| a. Did your college adopt/modify Center for Homeland Defense and Security (CHDS) course materials?                                      | ○ ○      |
| b. Did your college adopt/modify University and Agency Partnership Initiative's (UAPI) course materials (other than CHDS materials)?    | ○ ○      |
| c. Did your college adopt/modify Department of Homeland Security (DHS) course materials (any DHS agency)                                | ○ ○      |
| d. Did your college adopt/modify Department of Defense (DOD) course materials (any DOD agency/military branch)?                         | ○ ○      |
| e. Did your college adopt/modify pre-existing course materials from the department that houses its homeland security program?           | ○ ○      |
| f. Did your college adopt/modify course materials from departments other than the department that houses its homeland security program? | ○ ○      |



- g. Did your college employ a focus group/advisory council? ◦ ◦
- h. Did your college employ an accreditation agency/process? ◦ ◦
- i. *Other (Please specify)* \_\_\_\_\_ ◦ ◦

19. How important were each of the following in the development of your colleges' graduate homeland security curriculum?

[a-i will display only if survey participant answered Y for corresponding question in question #2]

- a. Center for Homeland Defense and Security (CHDS) course materials ◦ ◦ ◦ ◦
- b. University and Agency Partnership Initiative's (UAPI) course materials (other than CHDS materials) ◦ ◦ ◦ ◦
- c. Department of Homeland Security (DHS) course materials (any DHS agency) ◦ ◦ ◦ ◦
- d. Department of Defense (DOD) course materials (any DOD agency/military branch) ◦ ◦ ◦ ◦
- e. Pre-existing course materials from the department that houses your college's homeland security program ◦ ◦ ◦ ◦
- f. Course materials from departments other than the department that houses your college's homeland security program ◦ ◦ ◦ ◦
- g. Focus group /advisory council ◦ ◦ ◦ ◦
- h. Accreditation agency/process ◦ ◦ ◦ ◦
- i. *Other (Please specify)* answer from #18i. if applicable ◦ ◦ ◦ ◦
  - very important
  - somewhat important
  - not too important
  - not at all important

20. Which of the following **most** influenced the development of your colleges' graduate homeland security curriculum?

[a-i will display only if survey participant answered Y for corresponding question in question #2]

- Center for Homeland Defense and Security (CHDS) course materials
- University and Agency Partnership Initiative's (UAPI) course materials (other than CHDS materials)
- Department of Homeland Security (DHS) course materials (any DHS agency)
- Department of Defense (DOD) course materials (any DOD agency/military branch)
- Pre-existing course materials from the department that houses its homeland security program
- Course materials from departments other than the department that houses its homeland security program
- Focus group/advisory council
- Accreditation agency/process
- *Other (Please specify)* answer from #18i. if applicable

21. Which of the following **best** describes the **program delivery** of your college's graduate homeland security curriculum?
- Traditional classroom (face-to-face)
  - On-line
  - Blended (Hybrid: Traditional classroom and on-line)
  - Mixture of Traditional, On-line, and Blended
22. Please add any comments regarding the development of your colleges' graduate homeland security curriculum that were not covered in this survey that you feel are beneficial to this study.

G. Categorizing Graduate Homeland Security Curricula

23. Which of the following best describes how your college **categorized** (labeled) its graduate homeland security curriculum?
- \*If your college offered more than one graduate homeland security curricula (multiple degrees and/or certificates), check the box that best describes your college's **principal** graduate homeland security curriculum (program that has the most students).

- Homeland Security and Criminal Justice
- Homeland Security and Cyber Security/Information Technology
- Homeland Security and Emergency Management
- Homeland Security and Emergency Medical Services
- Homeland Security and Fire Science
- Homeland Security and Intelligence
- Homeland Security
- Homeland Security and National Security Affairs/International Affairs
- Homeland Security and Public Administration/Public Policy
- Homeland Security and Public Health
- Homeland Security and *Other (Please specify)* \_\_\_\_\_

24. How important were each of the following in determining the categorization of your colleges' graduate homeland security curriculum?
- |   |   |
|---|---|
| <input type="radio"/> Department that houses graduate homeland security curricula input | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> |
| <input type="radio"/> College administration input                                      | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> |
- very important
  - somewhat important
  - not too important
  - not at all important

25. Which of the following **best** describes your college's graduate homeland security curriculum?
- Single-discipline (curriculum focus is on a single discipline)
  - Multi-disciplinary (curriculum includes multiple perspectives and disciplines)
  - Inter-disciplinary (curriculum integrates multiple perspectives and disciplines)

26. Does your college's graduate homeland security curriculum include the following **topics?** [Yes/No]

- |  |   |
|--|---|
| a. All-hazards                                     | <input type="radio"/> <input type="radio"/> |
| b. Collaboration                                   | <input type="radio"/> <input type="radio"/> |
| c. Critical Thinking                               | <input type="radio"/> <input type="radio"/> |
| d. Critical Infrastructure                         | <input type="radio"/> <input type="radio"/> |
| e. Cyber Security/Information Technology           | <input type="radio"/> <input type="radio"/> |
| f. Emergency Management                            | <input type="radio"/> <input type="radio"/> |
| g. Emergency Medical Services                      | <input type="radio"/> <input type="radio"/> |
| h. Fire Science                                    | <input type="radio"/> <input type="radio"/> |
| i. Immigration                                     | <input type="radio"/> <input type="radio"/> |
| j. Intelligence                                    | <input type="radio"/> <input type="radio"/> |
| k. Law   | <input type="radio"/> <input type="radio"/> |
| l. Mapping (Geographical Information Systems)      | <input type="radio"/> <input type="radio"/> |
| m. National Security Affairs/International Affairs | <input type="radio"/> <input type="radio"/> |
| n. Preparedness                                    | <input type="radio"/> <input type="radio"/> |
| o. Public Administration/Public Policy             | <input type="radio"/> <input type="radio"/> |
| p. Public Health                                   | <input type="radio"/> <input type="radio"/> |
| q. Resilience                                      | <input type="radio"/> <input type="radio"/> |
| r. Risk Management                                 | <input type="radio"/> <input type="radio"/> |
| s. Strategy  | <input type="radio"/> <input type="radio"/> |
| t. Terrorism                                       | <input type="radio"/> <input type="radio"/> |
| u. <i>Other (Please Specify)</i> _____             | <input type="radio"/> <input type="radio"/> |

27. Please add any comments regarding the categorization of your colleges' graduate homeland security curriculum that were not covered in this survey that you feel are beneficial to this study.

#### H. Keeping Graduate Homeland Security Curricula Current

28. How does your college **keep its graduate homeland security curriculum current** as homeland security needs change?

\*If your college offered more than one graduate homeland security curricula (multiple degrees and/or certificates), answer the following questions based upon how your college keeps its **principal** graduate homeland security curriculum current (program that has the most students).

- |   |   |
|---|---|
|   | [Yes/ No]                                   |
| a. Faculty review UAPI website for new and updated course material                      | <input type="radio"/> <input type="radio"/> |
| b. Faculty review current government homeland security policy directives and strategies | <input type="radio"/> <input type="radio"/> |
| c. Faculty review current homeland security academic literature                         | <input type="radio"/> <input type="radio"/> |
| d. Faculty attends national homeland security conferences                               | <input type="radio"/> <input type="radio"/> |
| e. Faculty convenes focus group/advisory councils                                       | <input type="radio"/> <input type="radio"/> |
| f. Faculty conducts independent research  | <input type="radio"/> <input type="radio"/> |
| g. Faculty solicits student input/feedback  | <input type="radio"/> <input type="radio"/> |
| h. <i>Other (Please specify)</i> _____  | <input type="radio"/> <input type="radio"/> |

29. Which of the following was the most important factor in how your college **kept its graduate curriculum** current?
- Faculty reviewed UAPI website for new and updated course material
  - Faculty reviewed current government homeland security policy directives and strategies
  - Faculty reviewed current homeland security academic literature
  - Faculty attended national homeland security conferences
  - Faculty convened focus group/advisory councils
  - Faculty conducted independent research
  - Faculty solicited student input/feedback
  - Other (Please specify)* \_\_\_\_\_
30. Since your college first offered its graduate homeland security curriculum, how much has the curriculum been modified?
- A lot
  - Somewhat
  - Just a little
  - Not at all
31. Please add any comments regarding how your colleges keeps its graduate homeland security curriculum current that were not covered in this survey that you feel are beneficial to this study.

### III. Demographic Information

32. Your college is **best** described as a:
- Four-year private institution
  - Four-year public institution
  - Two-year public or private institution
  - Military institution
33. Where is your college located?
- Northeast-New England (ME, NH, VT, MA, RI, CT)
  - Northeast-Mid-Atlantic (NY, PA, NJ)
  - Midwest-East North Central (WI, MI, IL, IN OH)
  - Midwest-West North Central (MI, ND, SD, NE., KA, MN, IA)
  - South-South Atlantic (DE, MD, D.C., VA, WV, NC, SC, GA., FL)
  - South-East South Central (KY, TN, MS, AL)
  - South-West South Central (OK, TX, AR, LA)
  - West-Mountain (ID, MT, WY, NV, UT, CO, AR, NM)

- West-Pacific (AL, WA, OR, CA, HI)
  - *Other* (Please specify) \_\_\_\_\_
34. What is the student population of your college?
- Less than 1,000 students
  - 1001 -5000 students
  - 5001-10,000 students
  - More than 10,000 students
35. How many **students** are enrolled in all of your college's **undergraduate** homeland security programs?
- 1-50
  - 51-100
  - More than 100
- [Only appears if respondent checked Y for question #3a]
36. How many **students** are enrolled in all of your college's **graduate** homeland security programs?
- 1-50
  - 51-100
  - More than 100
- [Only appears if respondent checked Y for question #3b]
37. Which of the following agencies **accredits** your college?
- Middle States Association of Colleges and Schools
  - New England Association of Colleges
  - Northwest Commission on Colleges and Universities
  - North Central Association of Colleges and Schools
  - Southern Association of Colleges and Schools
  - Western Association of Schools and Colleges
  - *Other* (Please specify) \_\_\_\_\_
  - College is not accredited
38. What year did your college **establish** its homeland security program?
- Prior to 2002
  - 2002
  - 2003
  - 2004
  - 2005
  - 2006
  - 2007
  - 2008
  - 2009

- 2010
- 2011
- 2012
- 2013
- 2014

39. Which of the following **best** describes the **name of the department** that houses your college's homeland security program?

- Criminal Justice
- Cyber Security/Information Technology
- Emergency Management
- Emergency Medical Services
- Fire Science
- Homeland Security
- Intelligence
- National Security Affairs/International Affairs
- Public Administration/Public Policy
- Public Health
- *Other (Please specify)* \_\_\_\_\_

40. How many **full-time** faculty members does the department have?

- 1-5
- 6-10
- 11-15
- 16 or more

41. How many **part-time** faculty members does the department have?

- 1-5
- 6-10
- 11-15
- 16 or more

42. Please tell me whether each of the following describes the academic background of faculty (full and part-time) of the department that houses your college's homeland security program:

- |   | [Yes/No] |
|---|----------|
| a. Some faculty have a Criminal Justice academic background                                       | ○ ○      |
| b. Some faculty have an Cyber Security/Information Technology academic background                 | ○ ○      |
| c. Some faculty have an Emergency Management academic background                                  | ○ ○      |
| d. Some faculty have an Emergency Medical Services academic background                            | ○ ○      |
| e. Some faculty have a Fire Science academic background   | ○ ○      |
| f. Some faculty have a Homeland Security academic background                                      | ○ ○      |
| g. Some faculty have an Intelligence academic background  | ○ ○      |
| h. Some faculty have a National Security Affairs/International Affairs academic background        | ○ ○      |
| i. Some faculty have a Public Administration/Public Policy academic background                    | ○ ○      |
| j. Some faculty have a Public Health academic background  | ○ ○      |
| k. Some faculty have an academic background that is not described above<br>(Please specify) _____ | ○ ○      |

43. Which of the following **best** describes the academic background of faculty (full and part-time) of the department that houses your college's homeland security program?

- Criminal Justice
- Cyber Security/Information Technology
- Emergency Management
- Emergency Medical Services
- Fire Science
- Homeland Security
- Intelligence
- National Security Affairs/International Affairs
- Public Administration/Public Policy
- Public Health
- *Other (Please specify) \_\_\_\_\_*
- Department faculty's academic backgrounds are mixed to the extent that no one academic background represents a majority

44. Please add any comments regarding the development, categorizing, and keeping your college's homeland security curricula current that were not covered in this survey that you feel are beneficial to this study.

**Appendix V**  
**St. John Fisher College's Institutional Review Board Approval**



December 19, 2013

File No: 3308-121913-12

John Comiskey  
201-04 23 Ave  
Bayside, NY 11360

Dear Mr. Comiskey:

Thank you for submitting your research proposal to the Institutional Review Board.

I am pleased to inform you that the Board has approved your Expedited Review project, "How do college homeland security curricula prepare students for homeland security?"

Following federal guidelines, research related records should be maintained in a secure area for three years following the completion of the project at which time they may be destroyed.

Should you have any questions about this process or your responsibilities, please contact me at 385-5262 or by e-mail to [emerges@sjfc.edu](mailto:emerges@sjfc.edu), or if unable to reach me, please contact the IRB Administrator, Jamie Mosca, at 385-8318, e-mail [jmosca@sjfc.edu](mailto:jmosca@sjfc.edu).

Sincerely,

Eileen M. Merges, Ph.D.  
Chair, Institutional Review Board

EM;jlm

Copy: OAA IRB  
IRB: Approve expedited.doc

