

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

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ABSTRACT

This study analyzed the policies of colleges in the U.S. as they relate to homeland security curricula. The curricula were developed in the wake of the September 11, 2001 terrorist attacks, Hurricane Katrina in 2005, and other manmade and natural disasters. Homeland security was ill-defined and there was little consensus about what homeland security actually was. It was difficult to determine how colleges should prepare students for the field. The study surveyed college faculty to determine how colleges developed, categorized, and ensured that their homeland security curricula remained current as homeland security needs changed.

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 program names that resembled criminal justice, emergency management, and homeland security per se. The curricula were mostly multidisciplinary or 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. Colleges and academics are beginning to identify themselves, their academic departments, and related homeland security curricula as homeland security. They are beginning to recognize homeland security as an academic discipline. Much more, however, must be done if homeland security is to establish itself as a lasting discipline. Academics must come to a consensus about what homeland security is and the discipline must be seen as a profession.

INTRODUCTION

The terrorist attacks on September 11, 2001 demonstrated that the United States was not prepared for large-scale terrorist attacks. Hurricane Katrina in 2005 and other events demonstrated that the Nation was also unprepared for natural, accidental/technical, and adversarial/manmade threats of the twenty-first century into effective homeland security policies (DHS, 2005, 2011a, 2011b; DOD, 2013; The National Commission on Terrorist Attacks Upon the United States, 2004; White House, 2002, 2006, 2007, 2010). The result was at least eight different U.S. government definitions of homeland security that approached different threats with distinct policies (Reese,

2013). Professionals from multiple disciplines ranging from local public safety officials to national security policy makers were called upon to prevent/mitigate, respond to, and help the Nation recover from those disasters that did occur. Colleges saw the need to provide homeland security professionals with the knowledge, skills, and competencies necessary to meet those challenges (Charting a Course for Homeland Security Strategic Studies Conference, 2005; National Research Council, Committee on Educational Paradigms for Homeland Security, 2005; Rollins & Rowan, 2007). Many academics asked what is homeland security and how should they develop curricula that would prepare students for the nascent field (Bellavita, 2012; Bellavita & Gordon, 2006; CHDS, 2008, 2011, 2012; Kettl, 2003; Kiltz, 2011; Kiltz & Ramsay, 2012; Louden, 2007; McIntyre, 2002; McCreight, 2011; Pelfrey & Kelley, 2013; Plant, Arminio, & Thompson, 2011; Smith, 2005; Williams, McShane, & Karson, 2007; Winegar, 2008).

Since the 9/11 terrorist attacks, over 290 of the nation's colleges have offered over 400 homeland security related programs at the undergraduate and graduate levels. Programs ranged from criminal justice to national security and emergency management to public health. No common or core homeland security curricula standard, however, existed. Each program purported to help prepare students for various positions of responsibility in the field of homeland security. It was difficult to determine how colleges prepared students for homeland security. This study sought to identify how college homeland security curricula prepared students for the field. The study asked college faculty how did they develop, categorize, and ensure that their colleges' homeland security curricula remained current as homeland security needs changed. This article is adapted from the author's doctoral dissertation (Comiskey, 2014).

PURPOSE

Homeland security academics have an obligation to the evolving discipline to identify core competencies and to develop curricula that will grow and mature the field. They must identify the knowledge, skills, and competencies necessary for the field. The purpose of this study was to determine how college homeland security curricula prepared students for the field. The study begins with an analysis of homeland security policy and academia's responses to the challenges and opportunities inherent to the field. The analysis is followed by a description of the study's methodology and results including the identification of common homeland security curricula development processes, categories, and topics.

Homeland Security Policy. Homeland Security policy was the result of *focusing events*. Focusing events are sudden, unpredictable, and harmful events that gain the attention of policy makers and the public and drive national policy more so than other policy events (Birkland, 1977). The 9/11 attacks brought about the greatest reorganization of the U.S. government since the National Security Act of 1947 created the Department of Defense, the National Security Council, and the Central Intelligence Agency to secure the Nation in a post-World War II era. The

USA Patriot Act, the Homeland Security Act of 2002, and the Intelligence Reform and Prevention of Terrorism Act of 2004 expanded U.S. counterterrorism and intelligence authorities, created the Department of Homeland Security (DHS), and restructured the U.S. Intelligence Community.

In 2002, the White House released the first ever National Strategy for 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, 2002) The events of Hurricane Katrina in 2005 demonstrated that threats to the homeland were not limited to terrorism. Mother Nature’s unyielding power presented significant threats to the homeland. In 2007, the National Strategy for Homeland Security was revised to reflect an all-hazards approach to homeland security. All-hazards events were incidents that range from accidents and natural disasters to actual or potential terrorist attacks (White House, 2007; DHS, 2008).

In 2010, the National Security Strategy assumed a whole of government approach to advancing national security and interests in a changed world. Homeland security, defense, diplomacy, economic, and intelligence strategies were integrated into national 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) In 2014, DHS’ Quadrennial Homeland Security Review 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. 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.” (DHS, 2014a, p.14)

Center for Homeland Defense and Security. The Center for Homeland Defense and Security (CHDS) was created by Congress, the Department of Justice, and the Department of Defense 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 (CHDS, 2011). In 2003, the Department of Homeland Security assumed the Department of Justice’s sponsorship of CHDS.

CHDS’ programs included a homeland security masters’ degree and a University and Agency Partnership Initiative (UAPI). The masters’ program was designed to prepare a cadre of homeland security leaders to operate in an environment of extreme ambiguity with an emphasis on critical thinking around homeland security issues. Over 600 federal, state, local, and tribal officials have graduated from CHDS’ master’s program. Due to congressional constraints, members of the

private sector were not eligible to attend the 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. UAPI was established to share CHDS' curriculum and educational resources with colleges and interested agencies. UAPI hosted educational summits and curricula workshops and maintained a member subscribed website that provided associates with access to CHDS' and members' course materials. Membership grew to over 1,200 academic partners that represented over 290 colleges (CHDS, 2014).

Multiple Perceptions. Bellavita (2008) maintained that different members of the homeland security community had distinct ideas about what homeland security actually was. Law enforcement officials thought homeland security was mostly about terrorism. Emergency managers and fire service officers preferred the all-hazards conceptualization of homeland security. People who worked for federal agencies thought of homeland security in terms of terrorism and major catastrophes. Department of Defense officials saw homeland security as something that civilians did. Others thought of homeland security in terms of national security, jurisdictional hazards, meta-hazards, and *uber alles*. Jurisdictional hazards were specific to one's geographical area of responsibility; meta-hazards followers maintained that homeland security could be about almost anything; and *uber alles* was about justifying government efforts to curtail civil liberties. Distinct perceptions about homeland security created semantic stovepipes that insisted on one worldview.

The Homeland Security and Academic Environment Study found that scholars had not reached consensus on what homeland security was or what constituted appropriate courses. The homeland security academic discipline was an evolving ungoverned environment of numerous programs claiming to prepare students for various positions of responsibility. Colleges augmented existing courses and launched entire programs around security, defense, and terrorism related issues to attract federal funding, recruit new students, and prepare graduates for careers in homeland security. Over 1,800 disparate courses were associated with homeland security programs. Agreement and recognition of homeland security as an academic undertaking required that the discipline must first be accepted as a profession (Rollins & Rowan, 2007).

Multiple Disciplines. Academia responded to the events of September 11, 2001 with what many viewed as a new academic discipline. Academic programs associated with homeland security ranged from criminal justice to national security and emergency management to public health. The majority of programs were linked to three primary content areas: public administration, emergency management, and criminal justice. The breadth of the topic also led to programs in political science, history, psychology, public health, and other academic departments (CHDS, 2014; Supinski, 2011).

Public Administration programs focused on administering homeland security programs and professionalizing the discipline. Kettl (2003) argued that homeland security required *contingent coordination* –an approach that builds on existing administrative structures and policy capacity and pulls them together when they are needed as they are needed. Others found that homeland security like public administration was striving to establish and encompass a growing body of knowledge, link that body of knowledge to critical inquiry, and relate theory to practice and education to professional identity (Pelfrey & Pelfrey, 2009; Plant, Arminio, & Thompson, 2011).

Emergency Management programs concentrated on government responses to threats, crisis, and catastrophes. Most programs suggested that emergency management and homeland security were related. Emergency management and homeland security professionals were “entwined cousins of crisis management.” The field needed all hazards educational programs aimed at enhancing terrorism prevention, preparedness, and response. The programs should prepare students for homeland security and help develop the discipline (McCreight 2011).

Criminal Justice programs illuminated fundamental changes in the social, legal, and political landscape evoked by 9/11 and Hurricane Katrina. Some criminal justice academics maintained that law enforcement officials played a leading role during disasters. Criminal Justice was the ultimate discipline that drew upon emergency management, political science, public health, public management, psychology, organizational theory, and sociology. Criminal Justice programs could inform homeland security policy and practice (Louden, 2007; Williams, McShane, & Karson, 2007).

While each discipline framed homeland security in their own likeness, they all gravitated toward homeland security’s *wicked problems* and how to manage them. Wicked problems are policy issues that cannot be described definitively and do not have any ultimate or objective answers (Horn & Weber, 2007; Rittel & Weber, 1973). Academics from varying disciplines called for multidisciplinary and interdisciplinary curricula that captured the complexity of the field. Some academics argued that homeland security was a meta-discipline with different functions and specialties that ranged from border security to national security policy analysis. The meta-discipline’s cumulative knowledge, inquiry methods, and resources could prepare members of the homeland security enterprise for twenty-first century threats (Church, 2008; Simon, 2009; See also Bellavita, 2012).

METHODOLOGY

Over 290 of the nation’s colleges offered over 400 undergraduate or graduate level homeland security curricula. However, no common or core curricula standard existed 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 help determine how colleges prepared students for homeland security. Survey participants were asked

how their colleges developed, categorized, and ensured that their homeland security curricula remained current as homeland security needs changed.

Participants were also asked to provide demographic data on their colleges including: type (public or private, four-year or two-year, military); geographical location; regional accreditation; student population; year that homeland security program was established; name of the department that housed the homeland security program; and academic background of faculty from those departments. The survey contained fixed response multiple-choice questions some of which offered the response option “other” with space to comment if none of the fixed answers were applicable.

RESULTS

In April 2014, the Internet-based survey was forwarded via e-mail to 587 UAPI members that were identified as faculty members that teach homeland security at a U.S. college that offered homeland security curricula. College faculty was defined as Professors, Associate Professors, Assistant Professors, Specialist Professors, Lecturers, Instructors, Chairpersons, Program Coordinators/Directors/Managers and Adjunct Professors. The administration of the survey resulted in a return rate of $n=102$ (17.4%). However, as UAPI members self-identified their professional credentials, the survey was designed to filter out members that were mistakenly identified as college faculty. Ten survey participants were identified as not meeting the college faculty requirement. The survey was also designed to filter out survey participants that were not at least “somewhat involved” in the development, categorization, and ensuring that their colleges’ homeland security curricula remained current. Six survey respondents were identified as not having been at least somewhat involved in the curricula process. The 16 participants that were identified as non-faculty and/or not having been at least somewhat involved in the curricula process were not included in the analysis.

The final sample population was $n=86$ survey participants of which 67 (77.9%) were full-time faculty and 19 (22.1 %) were part-time faculty. Of the 86 survey participants, 72 (83.7%) were “very involved” and 14 (16.3%) were “somewhat involved” in their college’s homeland security curricula processes. The 86 participants provided data on a total of 112 undergraduate and graduate homeland security curricula, 60 of the survey participants reported that their colleges offered undergraduate homeland security curricula, 52 reported that their colleges offered graduate homeland security curricula, and 26 reported that their colleges offered both undergraduate and graduate homeland security curricula.

DEMOGRAPHICS

All 86 survey participants were affiliated with at least one of 293 colleges identified by UAPI as having a homeland security program as of March 1, 2014 (CHDS, 2014). Specifically, 35 (40.7%) of research participants’ colleges were four-year private institutions, 30 (34.9%) four year public schools, 12 (14%) two-

year public or private institutions, and 9 (10.5%) military institutions. 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% ($n=15$) regions as defined by the U.S. Census Bureau.

Eighty (93%) of the 86 colleges were accredited by one of the six U.S. Department of Education recognized regional accreditors. Research participants' colleges' student populations ranged from less than 1,000 students to over 10,000 with the majority (66.3%, $n=57$) of college's student population's exceeding 5,000 students. The years that colleges established their homeland security programs ranged from prior to 2002 to 2014, with the majority (63%, $n=54$) of programs established after 2006.

Research participants reported that the departments that housed their colleges' homeland security programs varied with the largest percentages specified as Criminal Justice (26.7%, $n=23$), Homeland Security (11.6%, $n=10$), Public Administration (8.1%, $n=7$) and 4.7% ($n=4$) for each of the following: Emergency Management, Intelligence, and National Security/International Affairs. Interestingly, 36% ($n=31$) of participants reported that the departments that housed their colleges' homeland security programs bore other names including: Anthropology; Business, Health, and Science; Global Health; International Rescue and Relief; Security Studies; Legal, Interagency and Multinational Operations; Engineering; Social Science and Human Services; and Sociology.

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: criminal justice, homeland security, intelligence, emergency management, public administration/policy, and national security/international affairs. In addition, 25 (29.1%) research participants reported that their faculty had other academic backgrounds including: agricultural biology, anthropology, architecture, aviation, business, civil rights, criminology, economics, education, engineering, food defense, history, journalism, law, medical, nursing, 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, and 15.1% ($n=13$) homeland security.

Research Questions. Owing to the unique purposes of undergraduate and graduate curricula and a debate about the efficacy of undergraduate homeland security curricula, survey participants were asked to complete separate

questionnaires for their undergraduate and graduate homeland security curricula. Undergraduate education lends itself to the liberalizing of students (Opperman, 2011). Graduate education lends itself to specialization, intensity, and preparing students for learned professions. Pelfrey and Kelley (2013) argued that as an area of study, homeland security was too immature and too broad to support a bachelor's degree in homeland security. Conversely, 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. 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 writing in courses developed for advanced undergraduates. Collier (2013) held that the community of homeland security educators had made progress toward establishing curriculum standards and accreditation. 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.

The nature of the debate about the efficacy of undergraduate homeland security programs may lie in the genesis of homeland security education. Homeland security education began as an inquiry into the preparedness for the threat of weapons of mass destruction. The events of the first terrorist attack on the World Trade Center in New York City in 1993, the 1995 Murrah Federal Building bombing in Oklahoma City, the 1996 Centennial Olympic bombing in Atlanta, and other terrorist attacks and threats left the U.S. government with the sense that the homeland was vulnerable to attack and that the Nation was unprepared (Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction, 1999, 2000; National Commission on Terrorism, 2001; President's Commission on Critical Infrastructure Protection, 1997; U.S. Commission on National Security/21st Century, 2001; White House Commission on Aviation Security, 1997).

In 1998, the U.S. Department of Justice 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. The terrorist attacks of September 11, 2001 accelerated ODP's inquiry into the preparedness for the threat of weapons of mass destruction and the emergence of the homeland security discipline. ODP identified 10 key disciplines and 152 tasks that they would need to accomplish to respond to weapons of mass destruction. The disciplines included: (a) emergency medical services, (b) emergency management, (c) fire services, (d) governmental administration, (e) health care, (f) hazardous materials, (g) law enforcement, (h) public health, (i) public safety communications, and (j) public works. The majority of the 152 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. 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, and helped establish the Center for Homeland Defense and Security (CHDS) in 2002 to provide graduate level education for select members of the homeland security enterprise that would address the 32 complex and higher level tasks (Pelfrey, Kelley, & May, 2002).

Since its inception, CHDS expanded its program offerings to include the University and Agency Partnership Initiative (UAPI) to promote partnerships with academia and homeland security professionals; executive leaders and homeland security specialty programs, and self-study courses. CHDS also sponsored the *Homeland Security Affairs Journal* and the Homeland Security Digital Library. Notably absent from CHDS' offerings were any undergraduate homeland security programs. CHDS' undergraduate homeland security initiatives were limited to a UAPI-led model homeland security undergraduate curriculum workshop and an annual UAPI faculty development workshop that updates college instructors and administrators at all levels on trends in homeland security curriculum (CHDS, 2009, 2015).

Pelfrey and Kelley (2013) argued that the most appropriate students for homeland security were homeland security practitioners in administrative or leadership positions. Aspirants to the field were not the most appropriate students for homeland security education. They also argued that the most appropriate tier of homeland security education was at the first graduate level (master's degree) that would prepare students to perform complex cognitive tasks. As Collier (2013) pointed out, Pelfrey and Kelley's survey data is limited to CHDS graduates and faculty and a panel of homeland security community leaders. The entire homeland security community does not seem to be represented. Pelfrey and Kelley did not mention private sector homeland security education programs and initiatives; a growing demand for homeland security specialists to implement and manage security programs; efforts in homeland security curriculum development such as the Homeland Security and Defense Education Consortium Association's (2009) draft of specialized accreditation standards for undergraduate homeland security curricula, and the UAPI-led model homeland security undergraduate curriculum workshop (CHDS, 2009); or a Congressional Research Service finding (Reese, 2013) that there was a lack of a consistent definition of homeland security. Collier noted that the lack of a good definition of homeland hampered efforts to create homeland security curricula at both the graduate and undergraduate levels.

Other efforts to assess undergraduate homeland security programs include Ramsay, Cutrer, and Raffel's (2010) development of educational objectives, program-level outcomes, and core academic areas for an undergraduate degree in homeland security; Ramirez and Riox's (2012) identification of relevant subjects and courses in undergraduate homeland security college curricula suitable for certain DHS employees; Travis and Bradshaw's (2012) identification of appropriate subject areas for baccalaureate curricula in homeland security; and a current

International Society for Preparedness, Resilience and Security (2015) initiative to identify the core body of knowledge of homeland security that might serve as a predicate for a model undergraduate curriculum. Notably, over 190 U.S. colleges now offer undergraduate homeland security programs (CHDS, 2014). Moreover, the most recent increase in homeland security higher education stems from a 2008 Transportation Security Administration undergraduate associates degree program. The 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 89 college partners and all 50 states (Transportation Security Administration, 2014).

Pelfrey, Kelley, and May's (2002) seminal homeland security study identified 10 key disciplines that should be trained to respond to weapons of mass destruction incidents. Since that time each of the 10 disciplines have been identified as members of the *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." (DHS, 2010, pp.viii-ix) Moreover, DHS' (2014a) most recent homeland security policy guidance demonstrates that members of the homeland security enterprise at all levels should be trained to prevent, mitigate, respond to, and help the American people recover from natural, accidental/technical, and adversarial/human caused threats (See also DHS, 2011a, 2011b, 2014b). As Collier (2013) argued, the most recent approaches to undergraduate homeland security education provide entry-level and front-line practitioners and aspirants to the field with the requisite homeland security knowledge and professional skills to protect the homeland.

Notwithstanding the unique purposes of undergraduate and graduate curricula and the debate about the efficacy of undergraduate homeland security curriculum, research participants' responses to the questionnaires demonstrated that colleges largely developed, categorized, and ensured that their undergraduate and graduate homeland security curricula remained current in the same manner. Research participants survey responses to the questionnaires were reported in the aggregate ($n=112$). Undergraduate ($n=60$) and graduate ($n=52$) homeland security curricula questionnaire responses that demonstrated significant variances were also reported.

How Colleges Developed Homeland Security Curricula. Colleges used multiple and varied means to develop their 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 to develop their homeland security curricula. In addition, research participants' colleges employed other

means that ranged from starting from scratch to getting input from subject matter experts, homeland security agencies, and State education officials. Notably, some colleges adapted graduate level courses to develop their undergraduate homeland security curricula.

Focus group/advisory councils (62.5%, $n=70$), adopting/modifying CHDS course materials (50.9%, $n=57$), and adopting pre-existing department course materials (48.2%, $n=54$), respectively represented the means “most used” to develop homeland security curricula. Focus groups/advisory councils (24.1%, $n=27$), adopting CHDS course materials (17.9%, $n=20$), and adopting pre-existing department course materials (12.5%, $n=14$) respectively also represented the means that “most influenced” the development of homeland security curricula. Numerous research participants’ comments referenced exchanges with homeland security officials and subject matter experts suggesting that the role of focus groups/advisory councils played an even larger role.

CHDS course materials played a larger role in the development of graduate homeland security curricula as compared to the role that they played in the development of undergraduate homeland security curricula. Specifically, 59.6% ($n=31$) of participants whose colleges offered graduate homeland security curricula reported that their colleges adopted/modified CHDS course materials to help develop their graduate curricula while 43.3% ($n=26$) of participants whose colleges offered undergraduate homeland security curricula reported that their colleges adopted/modified CHDS course materials to help develop their undergraduate curricula. Moreover, 26.9% ($n=14$) of research participants whose colleges offered graduate homeland security curricula reported that CHDS materials “most influenced” the development of their graduate curricula, while 10% ($n=6$) of participants whose colleges offered undergraduate homeland security curricula reported that CHDS course materials most influenced the development of their undergraduate curricula. The variances between the role of CHDS course materials in the development of graduate and undergraduate homeland security curricula is likely due to the existence of CHDS’ graduate homeland security curriculum and the nonexistence of a CHDS undergraduate curriculum.

How Colleges Categorized Homeland Security Curricula. The vast majority (83%, $n=93$) of research participant’s reported that their colleges’ homeland security curricula was multidisciplinary (43.8%, $n=49$) or interdisciplinary (39.3%, $n=44$). Colleges used various names to categorize their homeland security curricula. The vast majority of participants (71.4%, $n=80$) reported that their colleges categorized the curricula as either Homeland Security (26.8%, $n=30$), Homeland Security and Emergency Management (24.1%, $n=27$), or Homeland Security and Criminal Justice (20.5%, $n=23$). Research participants also reported that their colleges categorized the curricula as Homeland Security and: Intelligence, Public Administration, National Security/International Affairs, Fire Science, Homeland Defense, Security Studies (Border Security), Cyber Security, Corporate Security, and Law.

Graduate homeland security programs were more likely to be categorized as Homeland Security per se as compared to undergraduate programs. Conversely, undergraduate homeland security programs were more likely to be categorized as Homeland Security and Emergency Management as compared to graduate programs. Specifically, 32.7% ($n=17$) of research participants' colleges' graduate homeland security programs were categorized as Homeland Security per se as compared to 21.7% ($n=13$) of research participants' colleges' undergraduate homeland security programs that were categorized as Homeland Security per se. Moreover, 28.3% ($n=17$) of research participants' colleges' undergraduate homeland security programs were categorized as Homeland Security and Emergency Management as compared to 19.2% ($n=10$) of research participants' whose undergraduate homeland security was categorized as Homeland Security and Emergency Management.

Research participants' colleges included numerous and varied topics in their homeland security curricula that ranged from terrorism to humanitarian assistance. Despite the range and vastness of homeland security, the colleges consistently agreed (85% or higher) that 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 research participants' colleges also agreed on five other topics that include: public administration/policy, resilience, national security/international affairs, immigration, and public health. Significantly, collaboration, intelligence, strategy, all-hazards, critical infrastructure, emergency management, preparedness, risk management, cyber security/IT, law and especially terrorism all play a prominent role in DHS' most current homeland security policy guidance, the 2014 Quadrennial Homeland Security Review. The most highly rated topic terrorism (99%, $n=111$) mirrors DHS' counterterrorism-focused homeland security policy: preventing terrorist attacks on the Nation is, and should remain the "cornerstone" of homeland security (DHS, 2014a).

How Colleges Ensure That Homeland Security Curricula Remain Current.

Research participants' colleges used multiple and varied means to ensure that their homeland security curricula remained current with the 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; and convening focus groups/advisory councils to ensure that the curricula remained current. The majority (57.1%, $n=64$) also convened focus groups to ensure that the curricula remained current. Varied means were reported as "most important" to ensure that the curricula remained current 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%, $n=21$) were the most important.

Research participants' were asked how much their college's homeland security curricula had changed since they were first offered. Response options included *a lot*, *somewhat*, *just a little*, and *none*. The vast majority (85.7%) of homeland security curricula were modified at least "somewhat," 32.1% ($n=36$) were modified "a lot" and 53.6% ($n=60$) were modified "somewhat." Ostensibly, colleges are adapting their homeland security curricula to meet the challenges of the dynamic and rapidly evolving homeland security threat landscape.

CONCLUSIONS

This study sought to identify how college homeland security curricula prepared students for the field. The study identified common higher education homeland security curricula development processes, categories, topics, and disciplinary approaches. The study also affirmed a growing sense that homeland security is an evolving academic discipline (Bellavita, 2014; CHDS, 2012; Kiltz & Ramsay, 2012; Falkow, 2013; Palin, 2010; Rollins & Rowan, 2007; Ryan, 2009; Supinski, 2012).

Bellavita and Gordon (2006) argued that homeland security was in a pre-paradigm stage. Colleges, agencies, and textbooks conceptualized homeland security in many ways. Homeland security leaders operated in a domain categorized by problems and opportunities that existed in a multidimensional social, political, and technical environment that influenced what constituted effective action. Cumulatively, this study's findings suggest the beginnings of a paradigm shift: U.S. colleges and academics are beginning to recognize homeland security as an academic discipline. First, 26.8% ($n=30$) of colleges' homeland security curricula were best described by research participants as Homeland Security per se. Second, 85% or higher of research participants' colleges homeland security curricula contained the same 11 core topics. Third, 11.6% ($n=10$) of research participants reported that the departments that housed their college's homeland security curricula were best described as Homeland Security per se. Forth, 15.1% ($n=13$) of research participants reported that the academic background of those departments were best described as Homeland Security per se. Finally and what is most unique to the emerging paradigm, the vast majority (83%, $n=93$) of research participant's colleges' approach to their homeland security curricula was multidisciplinary (43.8%, $n=49$) or interdisciplinary (39.3%, $n=44$).

College's multi and interdisciplinary approaches to homeland security were a significant departure from what Friedman, Friedman, and Hampton-Sosa (2013) referred to as disciplinary elitism that permeates colleges in direct opposition to an otherwise open minded culture that opposes bigotry and intolerance. Seemingly, 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 are (c) dissolving the semantic stovepipes that Bellavita (2008) found insisted on one worldview and impede the strategic goal of a secure homeland.

Homeland security academics also seem to have resolved the debate about the efficacy of undergraduate homeland security programs. The study found that colleges are offering the same or similar courses, albeit at different levels, and are employing the same or similar processes to develop, categorize, and ensure that their undergraduate and graduate homeland security curricula remain current. The undergraduate programs have been validated by focus groups/advisory councils, accrediting and agency processes, and academic research. This supports Collier's (2013) argument that it is time to recognize that undergraduate homeland security programs require the same substantive knowledge and professional skills which were in the past reserved for graduate homeland security curricula. The findings also lends credence to the argument that before agreement and recognition of homeland security as an academic undertaking can take place, homeland security must first be accepted as a profession (Palin, 2010; Rollins & Rowan, 2007).

Professionals are generally held in high regard because they master a particular domain of practice that serves the public interest. Professional standards of competent practice serve as counterweights to malpractice. While different professions hold distinct competencies, they are said to share six common characteristics: (a) a commitment to serve in the interests of clients in particular and the welfare of society in general; (b) a body of theory or specialized knowledge; (c) a specialized set of skills and practices; (d) the capacity to render judgments with integrity under conditions of uncertainty; (e) an organized approach to learning from experience; and (f) a professional community responsible for the oversight and monitoring of quality in both practice and professional education. Physicians, lawyers, architects, and engineers are generally accepted as professionals. Nurses, social workers, and teachers are also generally accepted as professionals, but less so than the former. Professions are subject to their times, from the growing reach of new technologies to fiscal realities. Several other practitioners may also have some claim to professional status (Gardner & Shulman, 2005).

Members of the homeland security enterprise including emergency managers, emergency medical services, firefighters, governmental administrators, hazardous materials personnel, health care, intelligence, law enforcement, public health, public safety, public works, and others are tasked to prevent/mitigate, prepare for, respond to, and help the nation recover from incidents that range from large-scale accidents and natural disasters to actual or potential terrorist attacks. Subjects of their time, members of the homeland security enterprise personify the six common characteristics of professionals. The commitment to serve, knowledge and specialized skills applied, judgments made, lessons applied and created, and recognition of professional communities most recently evidenced by the events of Superstorm Sandy in 2012 and the Boston Marathon terror attacks in 2013 suggest that the disciplines that comprise the homeland security enterprise are professionals (DHS, 2013a, 2013b, 2013c, 2014a, 2014b). Homeland security may have reached what Gladwell (2000) described as a *tipping point*, a critical mass of circumstances that set us on a new and unstoppable course.

Ways Forward. Academics must come to a consensus about what homeland security actually is and the discipline must be seen as a profession. Definitions underpin theories that provide conceptual precision and help determine what has to be done. A consensus definition of homeland security would help provide criteria for competent homeland security professional practice. Homeland security academics and practitioners should as Palin (2010) and Bellavita (2012) argued operationalize and test their frameworks and theories, and as argued by Ramsay (2013) establish a recognized higher education accrediting mechanism.

Congress and DHS should establish undergraduate and doctoral level graduate homeland security programs dedicated to the creation and furtherance of homeland security theory and practice. A U.S. Homeland Security Academy modeled on the Nation's military academies would prepare a cadre of homeland security leaders for careers of professional excellence and service to the Nation and continual professional development. Academy graduates would serve their duty commitments with federal, state, local, and tribal government agencies or the private sector. Research produced from graduates' multijurisdictional and multiple agency experiences would help test and develop homeland security theory. A CHDS doctoral program modeled on its' master's program would generate evidenced-based research and theoretical frameworks that help secure the homeland. Added to the existing CHDS masters level graduate homeland security program, the undergraduate and doctoral level graduate homeland security programs would help define homeland security and generate homeland security theory as well as provide model homeland security curricula.

Moreover, the homeland security academic community should and appears to be moving towards program accreditation. Academic program accreditation provides criteria for competent practice, curricula development, and professional recognition. Bellavita and Gordon (2006) argued that it was too early in the development of homeland security to impose standards that might limit the field. Instead, we should let a thousand flowers bloom and a hundred schools of thought contend before we consider measures that might constrict the field. This study's findings suggest that Bellavita and Gordon's prescribed thousand homeland security flowers have bloomed and a hundred or so homeland security schools of thought have converged more than they have contented. It is time to select from the fields, those flowers that best provide competent homeland security practice.

Currently, the International Society for Preparedness, Resilience, and Security (2015) is developing accreditation standards for undergraduate and graduate homeland security. INSPRS was established in 2013 to facilitate trans-disciplinary collaboration between academics, policy makers, and practitioners that contribute to the homeland security, civil security, and public enterprise. Initial goals include setting education standards and supporting accreditation in higher educational programs for homeland security and similarly named programs. The organization has over 490 members that represent 13 nations (INSPRS, 2013). Homeland Security curricula accreditation will provide a framework for academic accountability and help develop homeland

security as a discipline and a profession. Homeland Security's academic community should embrace INSPRS' accreditation initiatives.

This study was exploratory in nature and was designed to help academics and practitioners identify what has to be done to protect the homeland. As expected, the study raised more questions about what homeland security actually is and how colleges should prepare students for the field rather than provide definitive prescriptions to those ends. Nonetheless, education is one of mankind's most hopeful endeavors. Adapting the education of homeland security professionals to modern challenges is a pursuit worthy of perpetual effort. This study continues that effort in the hope that others will continue the exploration and help secure the homeland.

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