

Partnership in Progress: A Model for Development of a Homeland Security Graduate Degree Program

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INTRODUCTION (HOW IT BEGAN)

Following the devastating terrorist attacks of 9/11, all of American society began to reexamine our homeland security procedures and paradigms. Ultimately, this scrutiny led to dramatic policy changes and reorganization at the highest levels of the federal government and to significant enhancements in emergency services training and security at the local government and community levels. Higher education did not escape this review, either, as leaders sought ways to enhance knowledge and skills of homeland security professionals as a means to mitigate future threats to the homeland. In 2002, David McIntyre offered a scathing critique of the homeland security education landscape that existed in those early days of this national self-examination:

There is no nationally recognized program of higher education at all. In fact, there is no generally accepted curriculum for homeland security, because there is no generally accepted body of knowledge upon which to base an academic discipline....

Worse, there is no tradition of education for the senior practitioners of homeland security. Mayors, business leaders, staffs, and senior officials generally learn by doing: they don't even know what concepts and organizing principles are missing.¹

In the seven years since McIntyre offered his critical perspective on homeland security higher education, some things have changed – and some have not. Yes, the national emphasis on homeland security has soared, illuminating the critical need and demand for quality educational programs that provide professionals the fundamental knowledge and skills to meet the current and future diverse national homeland security requirements. In turn, this has led to the creation of some government-sponsored educational programs, including the Center for Homeland Defense and Security (CHDS) master's degree program and the Department of Homeland Security University System.² Additionally, the Homeland Security and Defense Education Consortium (HSDEC) was founded to address educational issues relevant to the homeland security and homeland defense enterprise as the emerging academic discipline continues to mature and take on increasing significance.³ Augmenting these efforts are the hundreds of academic institutions that have initiated or expanded existing degree programs in response to the pivotal events of 9/11. In 2007, the Homeland Security Education Survey Project reported there were 215 homeland security-related degree and certificate programs.⁴ Just two years later, that number has grown significantly, as evidenced by the 271 programs listed on the CHDS partner institutions web page.⁵

Yet, despite this expansion of available programs, some of the challenges of 2002 still linger as colleges attempt to meet the increasing demand for quality degree and certificate programs in homeland security and emergency management. As the numbers

continue to grow, the question more and more prospective providers will be, or should be, asking is: *How can we build an effective, viable homeland security graduate program?* As Christopher Bellavita and Ellen Gordon observed, there is certainly no shortage of alternative approaches with “at least four dozen ways colleges, universities, agencies, and textbook publishers have conceptualized homeland security education.”⁶ Still, some suggest that the availability of quality graduate programs continues to trail behind demand by homeland security professionals.⁷ Anecdotal and limited empirical evidence from several sources supports this view. Examples include the continuing growth in the number of institutions offering graduate programs, as well as anecdotal comments by program managers of new programs describing the dramatic growth in enrollments. The vast size of the homeland security professional community and its forecasted continued growth provides ancillary evidence of the associated need for additional quality educational programs – at least some of them at the graduate level.⁸

This article describes a collaborative endeavor by two complementary graduate education providers to build an interdisciplinary graduate degree program that helps meet this growing demand for quality, effective, and viable homeland security educational programs. In the Midwest, this program begins the “tradition of education” for homeland security professionals that McEntyre found lacking by augmenting their experience-based knowledge with academic study of the key concepts and organizing principles relevant to the field.

In order to provide the context for how the program was developed, and how it will be situated in the homeland security profession, this article addresses three inter-related components of the Kansas State University (K-State) and U.S. Army Command and General Staff College (CGSC) Homeland Security Graduate Degree Program development. First, to provide the historical context, a brief overview traces the evolution of homeland security graduate education since 2001. Next, the article reviews the literature relating to identification of fundamental elements that experts and scholars have suggested should constitute a graduate homeland security curriculum. Finally, the article details the process used to develop the K-State/CGSC Homeland Security Graduate Program. This discussion is offered as an aid to others involved in or considering the development of their own regionally-responsive homeland security graduate degree program.

THE EVOLUTION OF HOMELAND SECURITY GRADUATE EDUCATION

Who We Are and Where We Are Going

Kansas State University (K-State) and the U.S. Army Command and General Staff College (CGSC) both have expertise of value in developing a homeland security graduate degree program. This program takes advantage of that expertise while building upon an already well-established history of collaboration that began in 1990.

K-State has existing courses and expertise in six different colleges addressing homeland security-related issues. Key areas include food safety, agriculture security and emergency planning, cyber-infrastructure and cyber-security, all-hazards emergency operations and planning, and infectious disease (human, animal and plant) parameters impacting public health. A particular strength is found in the food-animal disease arena,

with curriculum development within the Colleges of Veterinary Medicine, Agriculture, and Arts and Sciences. K-State's expertise in this focus area led the U.S. Department of Homeland Security (DHS) to select the university as a Center of Excellence for Emerging and Zoonotic Animal Diseases.⁹ In that capacity, K-State will develop and validate vaccines, create innovative devices to detect and diagnose threatening diseases, and help implement systems to curtail human and animal disease threats. Additionally, the U.S. Department of Agriculture's Arthropod-Borne Animal Disease Research Unit is relocating to K-State.¹⁰ These activities have validated the DHS decision to site the National Bio and Agro-Defense Facility on land contiguous with K-State at Manhattan, KS.

The U.S. Army Command and General Staff College is the largest graduate-level military service college in the United States and is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools (NCA) to grant a Master of Military Art and Science degree.¹¹ The ten-month curriculum emphasizes development of mid-career and senior officer skills in planning and conducting military operations – essential military skills that frequently parallel those required by homeland security professionals in the field.¹² Moreover, many CGSC faculty and students bring with them real-world training and experience commensurate with many of their homeland security professional peers: most have confronted the challenges associated with combating terrorism, protection of critical infrastructure, or consequence management through their participation in foreign security assistance missions around the globe; many have also assisted with domestic and international disaster assistance activities supporting relief efforts such as Hurricane Katrina, the tsunami in Indonesia, or the recent Haiti earthquake.¹³

As professionals in homeland security have learned, if relationships are established with counterparts in other key agencies before a crisis, then coordination after a crisis is more responsive and more effective. Despite their separate chains of command and their unique roles and responsibilities, military and civilian groups are often called upon to work side by side in crisis response and disaster assistance operations. While some critics might be concerned by increased military influence in domestic security-related matters, dealing with the complexities and uncertainties of the homeland security environment requires the high-level critical and creative thinking that results from considering the multiple perspectives that are reflective of a diverse group of homeland security practitioners and professionals. Combining these groups in educational programs can help to limit the impact of training and communications differences that otherwise might not be evident until they find themselves in the midst of a large-scale incident. Furthermore, this interagency and civil-military integration during homeland security planning processes may also have significant crisis deterrent or prevention possibilities. This opportunity for direct classroom integration of these two diverse groups of military and civilian homeland security professionals represents a key strength of the collaboration between K-State and CGSC. Complementary opportunities for integration of diverse regional assets enhance this strength.

A number of regional facilities and capabilities also provide potential for interagency educational integration. Ft. Leavenworth houses some of the most sophisticated simulations capabilities in the military, including the National Simulation Center,¹⁴ and

various simulation and exercise planning systems provided by and managed through the CGSC Digital Leader Development Center.¹⁵ While security classifications might preclude participation by non-military personnel, the use of selected simulation capabilities potentially could be expanded to include appropriately-cleared homeland security professionals. A multi-use Homeland Security training facility, funded and supported by the State of Kansas, offers an additional integrated educational opportunity for homeland security professionals. Located at the Great Plains Regional Training Center in Salina, KS, Crisis City provides a realistic simulation or exercise setting in which to practice interagency planning or crisis response.¹⁶ Additionally, within a one-hour drive of the Ft. Leavenworth campus are three key governmental organizations that represent federal, state, and city homeland security entities. The headquarters for Federal Emergency Management Agency Region VII is located in Kansas City, MO, just thirty miles to the southeast; the Kansas State Adjutant General, dual-hatted as the Director of Emergency Management and Homeland Security, is located in Topeka, KS, fifty-five miles to the southwest. Finally, the Mid-America Regional Council's Regional Homeland Security Coordinating Committee integrates the Kansas City area emergency response efforts and maximizes the sharing and coordination of resources among the various municipalities throughout eight counties in Kansas and Missouri.¹⁷ Collectively, these regional resources and capabilities can help provide a robust graduate educational experience for a diverse group of military and civilian homeland security professionals.

Together, as other educational institutions have done before them, K-State and CGSC have sought to fill a niche need for homeland security graduate education in order to better serve homeland security professionals regionally. Toward that goal, program developers have conscientiously and systematically addressed the complexity of issues which surround building such a curriculum – particularly given the uncertainties inherent in this new field of study. Equally important, rather than hastily constructing a program by merely piecing together existing courses, this collaboration has focused on building a core curriculum from scratch, informed by a review of current literature, and, most importantly, a deliberate needs analysis of homeland professionals and other stakeholders in the region. Program developers have placed priority on meeting the regional homeland security educational needs, rather than on profiting from quick implementation and rapid growth of enrollments.

Previous Approaches to Curriculum Development

Foremost in developing a new graduate degree program should be a commitment to meeting identified needs of homeland security professionals at all levels. A review of the literature highlights some of the prevalent curriculum development questions that must be examined or considered. Even before the 9/11 attacks, the Office for Domestic Preparedness (ODP) had sought to determine whether existing training programs were meeting the needs of the various jurisdictions within the U.S. Department of Justice. In August 2001, a collaborative team of training, education, and strategic planners, and subject matter experts completed the *ODP Training Strategy* that focused on five key questions:

1. Who should be trained?

2. What tasks should they be trained to perform?
3. Which training instruction/delivery methods and training sites should be paired with which tasks to maximize success in training?
4. Which methods are most capable of evaluating competencies and performance upon completion of training?
5. What gaps need to be remedied in existing training to assure consistency with the findings of the training strategy?¹⁸

From that study, ODP determined that key gaps existed in training programs associated with the more complex upper-level leadership challenges requiring critical thinking and problem-solving approaches; filling these gaps would require an educational, vice training, approach. With the 9/11 attacks just one month later, the ODP recommendations gained momentum, and in April 2002, the U.S. Department of Justice (DoJ) and the U.S. Department of Defense (DoD), with the support of Congress, signed an interagency agreement to establish the Center for Homeland Defense and Security (CHDS) at the Naval Postgraduate School in Monterey, CA.¹⁹ The Center immediately embarked on building the first post-9/11 homeland security graduate program incorporating an evidence-based curriculum – that is, a curriculum designed around policy, practice, and program needs identified through empirical research.²⁰

In January 2003, CHDS welcomed its first cohort of students into a new, inquiry-based homeland security master's degree program. This program was an innovative approach to serve the homeland security educational needs of senior leaders of local, state, and federal government agencies across the country. From that initial start, the program has grown steadily. The Center has established the Executive Leaders Program, a certificate program designed to meet the needs of senior leaders who prefer a shorter, more focused program. It has also created the Mobile Education Team program to provide strategic-level seminars to governors and their cabinets and major urban area leaders.²¹ The expanded CHDS role now also includes development and stewardship of the Homeland Security Digital Library, publication of the *Homeland Security Affairs Journal*, and the encouragement of professional networking among higher education institutions through the University and Agency Partnership Initiative (UAPI).²²

The CHDS program is a sound model for development of a quality graduate program and addresses a need defined by national leaders to fill a critical gap in graduate-level education. In the CHDS approach, a needs analysis of the national shortfalls led logically to the development of a nationally-focused, broad-based master's degree program. Students participating in that program have represented all areas of homeland security, every level of government, and most of the fifty states. The impact of CHDS is unmistakable.

Despite the success of the CHDS programs, they still only serve a small segment of the homeland security profession. Because of congressional prohibitions, the CHDS program is not available to private-sector attendees – an educational gap that must be served by other institutions. For eligible public-sector applicants, acceptance into the CHDS master's degree program is a highly competitive process; only 28 percent of those who complete the entire application process are selected into the program. As of December 31, 2008, 262 students had earned master's degrees through CHDS.²³ Yet,

there were at least an additional 1,000 who completed the entire application process but were not admitted, and an estimated 9,000 who began, but did not complete the application process.²⁴ Clearly, there are thousands of homeland security officials and professionals throughout the country who would benefit from a homeland security graduate degree, but who are not eligible for the CHDS master's degree program.

In light of the capacity limitations of CHDS, homeland security professionals created a parallel demand for alternative opportunities offered through other accessible homeland security educational providers. As a result, hundreds of academic, credit-bearing, undergraduate and master's degree programs have been developed to meet the growing needs of homeland security professionals. Representative programs can be found at Pennsylvania State University, Long Island University's Homeland Security Management Institute (HSMI), San Diego State University, Tulane University, and California Polytechnic State University.

One of the more established homeland security graduate degree programs is the thirty-three-credit-hour Master of Homeland Security in Public Health Preparedness first offered by Pennsylvania State University in 2005. This multi-disciplinary face-to-face program exploits the institution's strengths in its niche area of public health by drawing upon the expertise of seven colleges that contribute in such key areas as agricultural sciences, medicine, engineering, and information sciences and technology.

Another seasoned program can be found at Long Island University's Homeland Security Management Institute. In 2006, the HSMI expanded its 15-credit graduate credential program to offer a thirty-six-credit master's degree in Homeland Security Management. This fully online degree program serves homeland security personnel from across the country; its students, mostly working professionals, also represent a broad spectrum of homeland security and emergency management occupations. Additionally, through federally-funded research as a member of the National Security Center of Excellence for the Department of Homeland Security, the Homeland Security Management Institute contributes directly to the body of knowledge on issues relating to transportation security.²⁵

More recently, the San Diego State University Graduate Program in Homeland Security has created a face-to-face master's degree program that reflects a distinct, regional focus associated with the school's proximity to Mexico. Established in 2007, the program offers specializations in such regional-relevant areas as border security, terrorism, and irregular warfare, and includes a unique study abroad requirement.²⁶

The Master of Professional Studies Homeland Security Program at Tulane University also serves a working professional student population. Accepting its first students in spring 2010, this face-to-face program, offered through the University's School of Continuing Studies, emphasizes an all-hazards perspective, concentrating on managerial roles of leadership and decision-making in terrorism and disaster responses.²⁷

The California Polytechnic State University, in partnership with the California Emergency Management Agency, is expanding its offerings for homeland security and disaster management professionals. This includes the addition of a new online program developed from a pre-existing graduate certificate program. The new Master's of

Professional Studies Program in Disaster Management and Homeland Security is expected to open in fall 2010.²⁸

Each of these examples represents the institution's effort to develop a homeland security program that addresses questions similar to those asked by the early CHDS educators. Each institution has separately sought answers to the fundamental questions: *who should the program serve* and *what should it teach?* Each has endeavored to meet the needs of its own constituency by effectively incorporating program concentrations and specializations that are most relevant to that institution's particular setting. As these examples illustrate, there is no one-size-fits-all solution to homeland security graduate program development. Thus, despite the great work done by those building effective programs such as these, for those just embarking on building a program, the answers to questions regarding program design may still seem as elusive today as they did in 2002.

ELEMENTS OF HOMELAND SECURITY GRADUATE EDUCATION PROGRAMS

Creating New Academic Programs: The Challenge

In a recent critique, Robert McCreight identified four issues, strikingly similar to those expressed seven years earlier, that continue to challenge the higher education community: reconciliation of the distinctions between homeland security and emergency management, the degree of standardization necessary or appropriate for instruction in these complex subjects, the extent to which educational programs prepare students to perform successfully as emergency managers or homeland security professionals, and determination of topics and concepts to be taught.²⁹ Some things have not changed. As McCreight acknowledges, given the diverse nature of the homeland security field, resolving these issues will not be an easy task; but overlooking these issues would be irresponsible in any new program development. He further asserts that, "there ought to be consensus among practitioners, scholars, and related professionals alike that certain fundamentals become part of a thirty-three-credit hour graduate program or a twenty-four-credit hour undergraduate requirement"³⁰

The Questions of Standardization and Quality

Through the years, numerous attempts have been made to reach the consensus that McCreight calls for. As new homeland security issues and challenges emerged, content emphasis changed accordingly. For example, the term *all hazards* was not generally part of the homeland security lexicon until after the Hurricane Katrina catastrophe in late August 2005; since then, it has become a popular descriptor for comprehensive homeland security programs and approaches. McIntyre described the top homeland security priorities defined when the Department of Homeland Security (DHS) was first established, as reflected in the national strategy and in the initial organization of the department: borders, bioterrorism (and threats from weapons of mass destruction), training first responders, intelligence sharing, and alerts (system and response).³¹ While these may have been a good starting point for defining the priorities for homeland

security in general, they are clearly not sufficient to guide the development of homeland security educational programs.

The Homeland Security/Defense Education Consortium (HSDEC) attempted to find the common ground and to propose standardized educational outcomes that would encourage more rigor and accountability across homeland security related programs. In August 2005, HSDEC hosted a workshop comprising twenty-five representatives from twenty universities to identify common topic areas that should be included in graduate-level homeland security educational programs. The result was a set of core content areas recommended for emphasis in homeland security graduate programs: current and emerging threats; context and organizations; policies, strategies, and legal issues; processes and management; and practical applications.³²

The Homeland Security Education Survey Project, sponsored by HSDEC, collected data and conducted an analysis of the commonalities, differences, and trends among the various academic programs in emergency management, homeland security, and fire protection/science.³³ The project final report, published in May 2007, identified the prevalent homeland security educational challenges illuminated by a review of more than 200 degree and certificate programs. Specifically, the final report identified issues that detract from the otherwise growing legitimacy of homeland security as an area of academic study. It was found that, although academic collaboration is increasing in the homeland security academic field, so are concerns regarding program standards and eventual program accreditation, and methods by which to assess program graduate competencies.³⁴

Notwithstanding McCreight's call for consensus, it is difficult, if not impossible, to establish a uniform set of standards for all academic programs that span the homeland security-related professions from local emergency responders to national policy-makers. Certainly, these areas may overlap in their knowledge and skills requirements; however, painting them all with the same brush ignores some significant differences in purpose and application. It is possible that the proliferation of new degree and certificate programs has compounded this problem of standardization with imprecise program or course names that imply stronger connections to homeland security content than actually exist.

In the Homeland Security Education Survey Project, John Rollins and Joseph Rowan found that little standardization existed from one program to the next in course design, content, or delivery system.³⁵ Many pre-9/11 emergency management, disaster management, or public policy programs had been merely re-badged with the title "homeland security;" in some cases the link to homeland security was suspect, perhaps driven by funding and recruitment factors, rather than a truthful description of a program.³⁶ Just as some degree programs were merely renamed, others were cobbled together from a few existing political science, public administration, and other courses to create a new program with an in-vogue homeland security title. In both cases, they noted that degree titles did not necessarily reflect the focus of the courses comprising the programs; and programs with similar course titles might differ dramatically in course content.³⁷ Presumably, most were legitimate efforts to help meet the emergent homeland security education needs; however, others may have been driven more by a desire to capitalize on the national emphasis on homeland security and the once

seemingly plentiful source of federal funding that was initially tied to it. These inconsistencies relating to program naming and content highlight McCreight's concern regarding standardization.³⁸

Further exacerbating the problem of standardization, no uniform program requirements or overarching program outcomes have been established to serve as guidelines for curriculum development. Currently, higher education programs are required by accreditation agencies to show how the program meets the standards of the accrediting body. Approval of newly created degree programs is dependent upon having a comprehensive assessment plan and the ability to document program outcomes.³⁹ But, without established, agreed-upon outcomes, accreditation of homeland security degree programs becomes problematic. To address this deficiency, as other extant professional disciplines have, HSDECA has championed the development of homeland security program outcomes and has initiated efforts to pursue recognition as an accrediting organization to ensure consistent quality and focus.⁴⁰ While these accreditation efforts may provide the impetus for program enhancements and drastically improve the homeland security educational system, caution must be exercised before blindly adopting accreditation standards for homeland security educational programs. As the 2006 Spellings Commission report noted, "Accreditation and federal and state regulations, while designed to assure quality in higher education, can sometimes impede innovation and limit the outside capital investment that is vital for expansion and capacity building."⁴¹ In the young and still evolving field of homeland security graduate education, limitations on program innovation, expansion, and capacity building could be counterproductive. Nevertheless, institutions building new homeland security programs could benefit if the field was able to assist them in identifying core program outcomes.

In part, the difficulty in defining a standardized set of educational outcomes stems from the lack of a common definition of homeland security and from parochial views about what is most important within the field.⁴² Viewpoints are as wide as the field itself. As Bellavita observed, definitions of homeland security often align with jurisdictional perspectives:

In my experience, the emergency management "community of interest" and the fire services tend to constellate around the *All Hazards* definition, law enforcement tends to cohere around *Homeland Security as Preventing Terrorism*, people who work for a federal agency tend toward *Terrorism and Major Catastrophes*, and the Department of Defense sees homeland security as what civilians do.⁴³ [Emphasis in original]

Bellavita proceeded to offer seven definitions of homeland security that he suggested describe fundamental discipline-specific beliefs about homeland security. As with the DHS homeland security priorities, while these definitions may help define the scope of the diverse field of homeland security, they are insufficient to outline a core set of graduate homeland security courses; however, they do hint at possible specialization areas to be included in an interdisciplinary program.

Competencies and Outcomes

Several other authors have also explored what content areas should comprise a graduate homeland security core curriculum. Lists typically include such fundamental common areas as threats and vulnerabilities, science and technology issues, roles and responsibilities of the varied levels of government, roles of other public and private entities, planning procedures and processes, interagency coordination and cooperation, legal aspects, and intelligence and information sharing. These key areas were reflected in McIntyre's 2002 list and continue to be considered as basic academic underpinnings of contemporary homeland security curricula.⁴⁴ Yet, in the authors' descriptions of these common areas, there is also a notable shift in emphasis coinciding with the occurrence of the Hurricane Katrina catastrophe: pre-Katrina lists emphasize combating terrorism while post-Katrina lists focus more on an all-hazards perspective.⁴⁵

Bellavita and Gordon also emphasize those common areas listed above. While described and combined somewhat differently, their list details the twelve competency areas that define the core instruction for the CHDS master's degree program.⁴⁶ Evident in their list, however, is a distinct emphasis on combating terrorism. In five instances, the term *terrorists* or *terrorism* is expressly used to describe a given competency; in several others, this focus is alluded to indirectly. For example, the emphasis on the role of terrorism in homeland security is made explicitly in highlighting the requirement to understand the "logics, strategies, methods, and consequences of terrorism;" this emphasis is made implicitly, but equally clearly, in their call to emphasize "science and technology of weapons of mass destruction."

At the *Workshop on National Needs (WON2)*, cosponsored by the Homeland Security and Defense Education Consortium and Texas A&M University in 2007, representatives from ten prominent universities sought to identify "What Employers Want from Graduate Education in Homeland Security."⁴⁷ To provide a basis for their assessment, they invited key homeland security stakeholders to share their personal, vice institutional, perspectives. These stakeholders represented a cross-section of federal, state, and local government, and private industry, and included homeland security-related disciplines ranging from law enforcement and emergency management to veterinary medicine and food safety. The results indicated that these employers of homeland security professionals affirmed the competencies previously identified and displayed a distinctive post-Katrina emphasis on all-hazards planning and response.

Specifically, the following knowledge, skills, and abilities were prominently cited as core competencies: applying basic technology; a basic understanding of science, especially the biological sciences; effective communications (written, oral and interpersonal); critical thinking and analysis; resource management (planning, budgeting and project management); and "real world experience." While it could be argued that effective communications and critical thinking and analysis are hallmarks of educated people in general, these skills have been repeatedly cited as important for homeland security professionals, suggesting these skills may take on even greater significance in the complex, ambiguous, and hazardous world of homeland security. Additionally, the following discipline-specific content areas were emphasized: fundamentals of homeland security; fundamentals of government; business principles; criminal justice and law enforcement; emergency management; national defense and intelligence apparatus; risk management; and international considerations.⁴⁸

McCreight's own list included twelve key topic areas that correlated closely with other lists. Contrasted with Bellavita and Gordon, McCreight did not expressly include terrorism in any of his competencies; instead, he emphasized more of an all-hazards perspective, using the term *emergency management* in five of the twelve areas in his list. Also appearing in McCreight's list was a focus on exercise design and coordination principles,⁴⁹ as reflected in the HSDEC recommended content areas and related to the WON2 emphasis on real world experience.

More recently, in his address at the Fourth Annual Homeland Defense and Security Education Summit, Michael Chertoff, secretary of the U.S. Department of Homeland Security from 2005 to 2009, suggested seven core curriculum elements integral to homeland security education: (1) intelligence, to include collection, analysis (with due consideration of the language, psychology, and risk factors of terrorists), and dissemination; (2) technology capabilities focusing on software, detectors, and new systems; (3) emergency management, including community preparation, planning (which he described as a well-defined military skill set less frequently visible in the civil sector), and response with a special focus on helping communities to become resilient by building backup systems; (4) understanding of legal constraints that underpin all military and governmental doctrines and actions; (5) international relations and processes, to include border security and immigration, as well as relations and constraints specific to the European Union vice its constituent nations; (6) cyber-security, and (7) social psychology, with a increasing focus on the need to incentivize behaviors.⁵⁰ Chertoff's list overlapped with many of the other recommendations previously summarized. Again, a post-Katrina all-hazards perspective was emphasized; however, Chertoff also added a new focal point by emphasizing the psychological aspect of homeland security and the importance of positively influencing behaviors in preparedness and mitigation aspects of crisis response.

Without a well-defined set of standardized educational outcomes to guide program development, early pioneers in homeland security graduate education were forced to build their programs "from scratch," relying on inputs from homeland security stakeholders to help refine the program design. In fact, CHDS attributes some of its success to the early emphasis on tailoring the program to the needs of the homeland security leadership and practitioners the program would serve.⁵¹ Based on their lessons learned through the development of the Pennsylvania State University master's program from infancy to maturity, Peter Forster and Jeremy Plant offer these invaluable insights for others seeking to build and institutionalize a quality interdisciplinary homeland security graduate program: the program should be based on market research, faculty must be committed to teaching in a homeland security program, solid program development is time intensive and cannot be rushed, and the established program must be responsive to students and connect with the field's practitioners.⁵²

The *Workshop on National Needs* discussed earlier is an excellent example of the use of effective market research to identify what competencies employers want from homeland security professionals. Forster and Plant also suggest that effective market research will aid in selecting the most appropriate program delivery mode – whether it should be offered in residence, online, or in combination.⁵³ To ensure the most qualified continue to be hired or promoted, quality programs that fit individual professional

needs must be readily accessible to homeland security professionals. For some, access to online programs may satisfy their needs. Others may prefer programs that offer a more traditional face-to-face educational experience. In either case, programs should be provided through respected, accredited institutions, and taught by qualified faculty with subject matter expertise in their teaching area. K-State and CGSC are two such institutions.

Since those early days in the development of homeland security educational programs, experts and practitioners have attempted to more narrowly define specific program outcomes that would address specific competencies associated with the field of homeland security. At every institution in which graduate homeland security programs have been or are being developed, program planners must address this issue. Although these planners may give due consideration to what other institutions have included, in the end, their interpretations of what should be included and what should be emphasized invariably results in a program distinct from any of those that may have served as models. In his remarks at the WON2, Stanley Supinski, a perennial pioneer and contributor to the homeland security education effort, highlighted the significance of the institution-specific approach to the development of homeland security graduate educational programs: “The programs and curricula we develop will take many shapes, and certainly the quality and applicability to certain sectors of the workforce will vary.”⁵⁴ Quoting from Drabek, he continued,

But the independence and autonomy of the universities, and those working within all settings of higher learning, must be maintained. Decisions regarding curricular content and assessments of academic excellence must come from within these institutions and accreditation procedures and bodies they construct. As the professions of emergency management and homeland security continue to evolve, they must become more active participants in the standard setting process.⁵⁵

In this context, K-State and CGSC began their homeland security graduate degree program development.

HSDEC and DoD Recommendations and Guidelines

Faced with the wide range of perspectives reflected in the literature, curriculum developers sought to identify the most appropriate framework for the development of the K-State/CGSC Homeland Security Graduate Degree Program. Their search brought them back to the recommendations of the initial HSDEC-sponsored workshop.⁵⁶ Although they were developed in 2005, and prior to the more recent emphasis on all-hazards planning and response, the HSDEC recommendations were a consensus perspective of twenty-five identified homeland security educational experts and they continue to be widely recognized and accepted. Not only do they encompass the critical curriculum components addressed in earlier literature, but they also stress the importance of including practical applications and exercises, an important aspect that had previously been overlooked or downplayed by some authors. Furthermore, the HSDEC-suggested content areas are concisely organized, easily transferrable to newly-created degree programs, and useful in identifying critical curriculum content

requirements. In short, they were well-suited for use in the development of the K-State/CGSC graduate program.

Finally, because the joint K-State/CGSC graduate program will include a significant number of military students, curriculum planners also examined those competencies considered by the Department of Defense to be necessary for homeland security professionals. The twelve DoD competencies include the following areas: ethics, collaboration, communication, creative and critical thinking, cultural awareness, strategic leadership, management and planning skills, adaptability, crisis management, critical expertise, science and technology expertise, and risk management.⁵⁷ Together, the HSDEC content area recommendations and the DoD competencies have been used to aid in the comprehensive and on-going curriculum development of the K-State/CGSC Homeland Security Graduate Degree Program.

Recognizing its value, the “build-from-scratch” approach employed out of necessity by those early programs was adopted by choice in the development of the K-State/CGSC curriculum. The development began with a comprehensive analysis of the needs of the regional homeland security professionals and a correlation of those expressed needs with the established HSDEC and DoD recommendations. Ultimately, this deliberate and systematic planning process is creating an entirely new program – not merely including or modifying existing courses. When finalized, the new program will comprise an entirely new set of core courses specifically tailored to match the needs of those whom the program will serve.

DEVELOPING A REGIONALLY-RESPONSIVE PROGRAM: THE K-STATE/CGSC APPROACH

Methodology

At the 4th Annual Homeland Defense and Security Education Summit, Barbara Yagerman, education, training and outreach director for the Office of Infrastructure Protection, Department of Homeland Security, described the approach that she sees as essential to the development of sound homeland security educational programs.

We need to foster development of a multi-disciplinary academic framework for homeland security education. There is a need for a "holistic approach" to homeland security education that provides the opportunity to focus, or specialize in discrete disciplines – such as infrastructure protection – within the overarching umbrella.⁵⁸

This “holistic approach” calls for a flexible and comprehensive program planning process. This process involves negotiations between and among the various stakeholders with their own organizational complexities, traditions, needs, and interests.⁵⁹ Considering the wide range of individual and institutional interests involved, Rosemary Caffarella’s interactive model of program planning was used as the basis for the development of this proposed interdisciplinary homeland security graduate program in an attempt to reflect the varied interests of the regional homeland security stakeholders.

In her interactive planning model, Caffarella describes twelve components that should be considered when planning programs for adults.⁶⁰ While all program planning

components apply to the development of the K-State/CGSC Homeland Security Graduate Program, planners initially paid particular attention to five key components: building a solid base of support, discerning the context, identifying program ideas, sorting and prioritizing program ideas, and developing program objectives.

Listening to Homeland Security Professionals

Building a Solid Base of Support

Rather than institutionalizing a curriculum that merely reflected the perspectives of those in the academe, K-State and CGSC began to build a solid base of support by seeking input from diverse groups of homeland security providers. Planners from both institutions jointly conducted a Regional Homeland Security Educational Needs Analysis Workshop to collect regional-specific 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 100 attending stakeholders represented academic, first responder, government (federal, state, tribal, and local), health, private industry, and military perspectives. Data was collected using both written surveys and facilitated focus groups. These data were then aligned with previously identified HSDEC content areas and DoD competencies to form core common areas that should be included in the proposed master's degree program.

Six randomly assigned focus groups, with an average of sixteen participants each, were asked to respond to three discussion questions, adhering to workshop ground rules established to ensure a free exchange of ideas in an environment of open and respectful debate. The following discussion questions guided the focus groups in identifying program ideas:

1. Identify and describe homeland security as a profession and as a field of study. As concisely as possible, tell us what homeland security signifies to you.
2. What are the regional specialized emphasis areas needed?
3. What are the key skill sets and required knowledge critical to this specialization?

For each focus group, K-State and CGSC shared responsibility to provide a facilitator and an information technology manager to moderate and collect group discussion key points.

Discerning the Context

Question 1 asked participants to “identify and describe homeland security as a profession and as a field of study.” This question served as an ice breaker to encourage attendees to share their perspectives and as a means to ensure that the group members had a common understanding of the professional and academic contexts in which development of the graduate program would take place. While the groups gained consensus on this without significant disagreement, their responses nevertheless represented a range of emphasis areas that seemed to align with individuals' concentration areas – just as Bellavita had concluded from his own experiences.⁶¹ At the end of the first hour, each group's comments were saved on a common access network drive and made available to other groups for review.

Identifying Program Ideas

The second hour of the focus group sessions began with a review of other groups' responses to the first question to informally compare and contrast with their own group's response and to determine if the group wanted to make any adjustments or refinements to its definition as a result of this review. Still in their original groups, participants then addressed the second discussion question: "What are the regional specialized emphasis areas needed?" At the end of the second hour, workshop coordinators and facilitators reviewed the focus group responses to identify common specialization areas. Six representative areas emerged from this initial review: agriculture and food, health and medical, information management and cyber security, strategic communication, homeland defense and civil support, and all-hazards planning and policy.

Sorting and Prioritizing Ideas

All workshop participants were then reconvened as a large group to review the focus group discussion summaries and the six specializations areas defined by previous sessions. For the final question, attendees were asked to participate in the specialization focus group that best reflected their own expertise. This self-selection was designed to ensure that those most expert in a given area were the ones proposing curriculum content information. The groups were to consider: "What are the key skill sets and required knowledge critical to this specialization? List content areas required for this specialization." Although groups were asked to focus specifically on skills unique to their areas of expertise, the group responses overlapped, highlighting the following key skill sets:

- Understanding communications and language
- Leadership, public speaking, and critical thinking
- Infrastructure protection and assessment
- Emergency and/or disaster management

An additional theme appeared important to a majority of participants, but had no specific curriculum implications: each content area specialization group highlighted the importance of understanding the differences between public health and medical services. Other responses during this focus group session affirmed the discussions in the earlier sessions regarding what skills and knowledge homeland security professionals need; however, little information was gleaned to guide specific course content development.

Unsure of what data the focus groups would produce, and to augment the data collected through the focus group sessions, attendees were also asked to complete a written survey through which they could provide individual perspectives that might not have been fully reflected in the entire group's work. Fifty-six completed surveys were received from 100 attendees for a 56 percent response rate. Table 1 shows the sample distribution by employment area.

Table 1. Survey Sample Distribution by Employment Area

Employment Area	Number of Surveys	Percent of Respondents	Percent of Attendees
State government	7	12.5%	7.0%
Federal Government	14	25.0%	14.0%
First responders	6	10.7%	6.0%
Health/Medical	3	5.4%	3.0%
Business	2	3.6%	2.0%
Academia	7	12.5%	7.0%
Military	6	10.7%	6.0%
Other*	11	19.6%	11.0%
Total	56	100.0%	56.0%

*Includes representatives of local government, chamber of commerce, public health, retired, emergency management, and a private consultant.

These surveys also highlighted some important common themes. For example, one question asked respondents to recommend a program name: “In your opinion, what is the most appropriate name for a degree program that provides both a broad overview of homeland security and, on an elective basis, specific in-depth focus in areas of specialization?” Responses to this question reflected a wide range of options consistent with the range of program names described by Rollins and Rowan in the Homeland Security Education Survey Project.⁶² Not surprisingly, and reinforcing Bellavita’s conclusions, the recommendations often emphasized the respondents’ areas of interest within homeland security.⁶³ Most recommendations included homeland security as the root, with additional descriptors appended to focus on such areas as policy and management, emergency management, or preparedness. Others included homeland security as the emphasis area for a degree in public health, public administration, or business administration.

Responses to the survey questions also closely paralleled the focus group results. On the survey, respondents were asked to “Identify and describe what you believe are the core professional competencies required by those involved in delivering Homeland Security. What do all graduates of this program need to know?” A review of the responses to this question yielded five areas that attendees considered core competencies for homeland security professionals: homeland security structures, authorities, roles, and responsibilities (30.4 percent); management and leadership, including decision-making, interpersonal skills, and critical thinking (21.4 percent); planning and capabilities (19.6 percent); common language and understanding (16.1 percent); and knowledge of incident command systems, including the National Incident Management System (NIMS) and the National Response Framework (NRF) (12.5 percent).

In a third question, attendees were asked: “If you were to develop 3 to 4 required, core courses in Homeland Security curriculum, what courses would you include? If possible, provide a 2 to 3 sentence description of these proposed courses.” Responses to this question also aligned closely with the results of the focus groups, as well as with the recommendations made by Bellavita and Gordon, McCreight, and others.⁶⁴ The most

commonly cited recommendations from the surveys included these areas: risk, threat, and vulnerability assessment (28.6 percent); incident command, NIMS, and NRF (25.0 percent); communication and understanding language (19.6 percent); history (14.3 percent); legal considerations (14.3 percent); and strategic policy (14.3 percent).

Correlating Regional Data with HSDEC Recommended Content Areas and DoD Competencies

Through the comprehensive analysis of focus group and survey data, the needs analysis workshop helped to identify fifteen discrete region-defined core competencies and highlighted the need for an interdisciplinary program to address each of those diverse competencies. These results were then correlated with the HSDEC Graduate Program Recommended Content Areas and DoD Competencies to help define program core course content. The correlation of the workshop regional data to HSDEC educational content areas and DoD homeland security competencies is shown in Table 2.

Table 2. Alignment of Workshop Core Common Areas with HSDEC Recommended 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

Developing Program Objectives and Core Courses

Based on this comprehensive analysis, the program areas were defined and aligned with each institution's content area and discipline strengths. From this conceptual framework, specific program objectives were developed to support each of the workshop-defined competency areas. These program objectives were then prioritized to define common core requirements and specialization areas of emphasis. The resultant proposed curriculum included fifteen credit hours devoted to core required courses and fifteen credit hours within an emphasis area.

Core courses were defined to address the foundational and interdisciplinary program objectives and will focus on five broad areas. Proposed course titles include Foundations of Homeland Security, Homeland Threats, Organizations Amid Crisis, Homeland Security Processes and Management, and Homeland Security in Practice. As previously referenced, Yagerman suggested homeland security professionals need educational programs that provide a broad-based understanding of the field while also allowing them to focus in their areas of specialization.⁶⁵ While a general homeland security curriculum will initially be launched incorporating the core courses identified above, curriculum planners also envision the development of six additional emphasis areas, building upon the strengths of K-State and CGSC. These emphasis areas will include agriculture and food, health and medicine, information management and cyber security, strategic communications, all-hazards planning and policy, and homeland defense and civil support. Within each of the emphasis areas, new courses will be developed to support the program objectives. In addition to developing program objectives and core courses, other important issues must be considered before a program is fully implemented.

Institutional Challenges

Unique institutional issues are created when developing new interdisciplinary degree programs, including decisions as to where the program should be housed, what admissions standards should be applied, and other critical concerns. Building institution-wide support can also be problematic. Institutional support waxes and wanes in the face of shifting leadership priorities, and may completely collapse as institutional leadership changes. The homeland security field has already witnessed the demise of potentially premier academic degree programs in the face of withering institutional support or critical personnel changes. These concerns, coupled with budgetary constraints that accompany the building of new academic programs in times of economic stress, challenge even the best curriculum development plan. Undeniably, institutions opting to build homeland security programs from existing degrees are more efficient in terms of time and money but the question remains to what degree are they meeting the identified needs of homeland security professionals.

As previously discussed, a fundamental planning consideration for this graduate program was to ensure that the final design would represent a built-from-scratch approach to meeting the actual educational needs of the homeland security

professionals it will serve, rather than merely repackaging and remarketing courses that currently existed in the two collaborating institutions. As a result, extensive curriculum development to create new, relevant courses is currently underway. Significant progress has been made, but significant work also remains to be done.

CONCLUSION

Throughout higher education, significant emphasis has been placed on improving the accessibility and quality of homeland security graduate educational offerings. Thus far, the catalyst for these efforts has been the federal government through a number of organizations, including the Department of Homeland Security, the Center for Homeland Defense and Security hosted at the Naval Postgraduate School, and the Homeland Security and Defense Education Consortium (originally established by the U.S. Northern Command, and now replaced by the Homeland Security and Defense Education Consortium Association). While these efforts have been productive, future success will depend not only on the collective and collaborative efforts of these federally-sponsored homeland security entities, but also on the research, innovation, and knowledge expansion provided by key educational institutions which have expertise in these areas. This article has described the efforts of two such institutions, K-State and CGSC, which have collaborated to develop a homeland security graduate degree program using a novel approach to ensure the expressed educational needs of homeland security professionals are addressed. More broadly, this article has traced the growing maturity of homeland security as the profession moves toward a theory of curriculum.

As Forster and Plant observed, building and institutionalizing a quality interdisciplinary homeland security graduate program takes time if it is to be done well. Program development must, therefore, be accomplished in a deliberate and methodical manner. The program must be based on appropriate market research to ensure the content and delivery methods are aligned with the needs of the prospective students and the priorities of the homeland security entities the program will serve; it must be responsive to students and connected to practitioners; and it must be delivered by knowledgeable faculty who are genuinely interested in homeland security.⁶⁶

An issue that many institutions may face is the matter of qualified and committed faculty, defined by Forster and Plant to be an essential element of a viable graduate program. As Supinski pointed out in a 2009 homeland security education update,⁶⁷ identifying individuals who have the academic credentials and the research and scholarship background required to become faculty members is one of the most pressing issues facing institutions developing graduate level homeland security degree programs. This issue is further magnified by the dearth of homeland security-specific doctoral programs or the identification of a complementary doctoral degree program that would support the intellectual development required of individuals who could serve as the primary program instructors.

Over the past two years, K-State and CGSC have conducted a thorough and deliberate program planning process that models the Forster and Plant recommendations.⁶⁸ First, they conducted targeted market research through focus groups and surveys of various stakeholders, including homeland security practitioners and employers. That data was

then analyzed and aligned with the HSDEC Recommended Content Areas and the DoD Competencies to help define program outcomes and course objectives. This analysis yielded a set of fifteen core common areas that were then organized into five core areas and six specialization areas of emphasis.

Although creating a interdisciplinary program enables homeland security professionals to concentrate in their discipline-specific emphasis areas, this approach also complicates the process of identifying program outcomes and demands that individual disciplines share in the learning outcome and assessment processes to contribute to program improvement. To address this challenge, next steps include developing program assessments (in partnership with discipline-specific subject matter experts) that will enable program critique and improvement through the assessment of learning outcomes. These assessments will include various instruments such as embedded course assignments and portfolios to ensure students achieve the level of professional preparation dictated by the program outcomes. While in the initial stages of defining the assessment process, it is expected that one key assessment instrument will capitalize on a specific CGSC strength by incorporating a capstone simulation exercise to evaluate students' abilities to apply program knowledge in a realistic homeland security scenario.

The proposed Homeland Security Graduate Degree Program consolidates the strengths of two institutions to fulfill the regional needs identified by the key homeland security stakeholders at the federal, state, tribal, and local levels. Development of this program capitalized on the long-standing educational partnership between these institutions, drawing on the expertise of six different K-State colleges and five teaching departments within CGSC. The result was the creation of new program focused on meeting the specific regional needs of the homeland security profession, rather than merely revising existing programs to generate rapid enrollment growth and financial gain.

Finally, this collaboration between K-State and CGSC represents an important step toward building a community of practice in support of Homeland Security research and education and, ultimately, better protection of American citizens from future catastrophic terrorist attacks or natural disasters. Clearly there is still a need for additional quality homeland security graduate programs. Other institutions considering adding new (or revising existing) homeland security graduate programs should consider the use of the HSDEC and DoD competencies as a framework for program analysis and design, as emphasis on these areas may help to reduce the accreditation, standardization, instructional quality, and competency measurement concerns. The process described here may serve as a useful model to ensure that the resulting program effectively meets the standards for quality and rigor expected by the homeland security educational community; that it adequately accommodates the access and relevance demands of the region's homeland security professionals; and that it fulfills the expectations of value and applicability for the federal, state, tribal and local homeland security agencies and other stakeholders.

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¹ David H. McEntyre, "Education for Homeland Security – The Critical Need," *ETS News*, Winter 2002-2003, 3.

² U.S. Department of Homeland Security, *Establishing a Department of Homeland Security University System: DHS Learning and Development Strategy* (Washington, DC: U.S. Department of Homeland Security, 2007).

³ The original organization was the Homeland Security and Defense Education Consortium (HSDEC). In 2009, the HSDEC Association (HSDECA) was established to continue the work of HSDEC. More information about HSDECA can be found on the website, <https://www.hsdeca.org>.

⁴ John Rollins and Joseph Rowan, "Homeland Security Education Survey Project" [PowerPoint Slides], paper presented at the Spring 2007 Symposium: NPS/HSDEC/DHS Education Summit, Fairfax, VA, February 27-28 2007); John Rollins and Joseph Rowan, "The Homeland Security Academic Environment: A Review of Current Activities and Issues for Consideration" (Homeland Security and Defense Education Consortium, 2007).

⁵ Center for Homeland Defense and Security (CHDS), *Education: The Key to Homeland Security Leadership* (Monterey, CA: U.S. Naval Postgraduate School, Center for Homeland Defense and Security, 2009).

⁶ Christopher Bellavita and Ellen M. Gordon, "Changing Homeland Security: Teaching the Core," *Homeland Security Affairs* II, no. 1 (2006): 1.

⁷ Stanley Supinski, "Homeland Security Education: The Current State" (lecture, Naval Postgraduate School, Monterey, CA, February 5, 2009), <http://www.chds.us/?player&id=906>.

⁸ The ODP estimated that more than 11 million emergency responders and other personnel in this country would need training to deal with terrorist incidents. Office of Justice Programs Office of Domestic Preparedness, U.S. Department of Justice, "Center for Domestic Preparedness Fact Sheet" (Anniston, AL: U.S. Department of Justice, 2002); Elka Jones, "Careers in Homeland Security: Many Jobs, One Mission," *Occupational Outlook Quarterly* (Summer 2006); Jones assessed that homeland security employment opportunities are among the fastest growing occupations – even during the current period of high unemployment.

⁹ Kansas State University, "K-State to Head the National Center of Excellence for Emerging Zoonotic and Animal Diseases," <http://www.k-state.edu/media/k-statement/vol32/30310k-statement.html>.

¹⁰ Agricultural Research Service U.S. Department of Agriculture, "FAQs about the Arthropod-Borne Animal Disease Research Unit," <http://www.ars.usda.gov/SP2UserFiles/Place/54100000/FAQsaboutABADRU.docx>.

¹¹ U.S. Army Command and General Staff College, "Self Study Report" (Ft. Leavenworth, KS: U.S. Army Command and General Staff College, 2005).

¹² This correlation between military skills in planning and conducting operations has also been noted in McEntyre, "Education for Homeland Security – The Critical Need" and in Michael Chertoff, "Remarks" (Address, Fourth Annual Homeland Defense and Security Education Summit, George Washington University, Washington, DC, February 24, 2010).

¹³ Ibid.

¹⁴ The National Simulation Center (NSC) supports U.S. Army exercises and rehearsals worldwide using state-of-the-art simulations to integrate live, virtual, and constructive training in the dynamic environment of full spectrum operations. Fort Leavenworth Public Affairs Office, "Fort Leavenworth Installation Guide" (Benchmark Publications, Inc.), http://www.militarynewcomers.com/FTLEAVENWORTH/resources/o2_mission.html.

¹⁵ The Digital Leader Development Center (DLDC) supports performance-oriented simulations and exercises throughout CGSC using both Commercial-off-the-Shelf (COTS) and Government-off-the Shelf (GOTS) simulations tailored to provide a challenging, relevant, and fully integrated learning environment within the classroom. U.S. Army Combined Arms Center, "Command and General Staff College," <http://www.cgsc.edu/staff/daoMission.asp>.

¹⁶ Great Plains Joint Training Center, "Crisis City Kansas" (Big Meaning, Inc.), <http://www.crisiscitykansas.com>.

¹⁷ Mid-America Regional Council, "Regional Homeland Security Coordinating Committee," Mid-America Regional Council, www.marc.org/emergency/rhscc.htm.

¹⁸ CHDS, "2002-2008 Report," 8.

¹⁹ Ibid.

²⁰ The key components of evidence-based education are: (1) promoting best-practices research and development, (2) facilitating review and evaluation of research, (3) disseminating research, and (4) developing and supporting an "evidence-based culture." Center for Homeland Defense and Security, *Education: The Key to Homeland Security Leadership* (Monterey, CA: U.S. Naval Postgraduate School, Center for Homeland Defense and Security, 2009), 7.

²¹ David O'Keeffe, *An Overview of the NPS Center for Homeland Defense and Security* (Monterey, CA: Naval Postgraduate School, 2008), Video.

²² Ibid.

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²⁵ Long Island University, "Homeland Security Management Institute," <http://www.southampton.liu.edu/homeland/>.

²⁶ San Diego State University, "Graduate Program in Homeland Security," <http://homelandsecurity.sdsu.edu/>.

²⁷ Tulane University, "Degrees & Programs: Homeland Security Studies," http://www.tulane.edu/~uc/degrees_programs/homeland.htm.

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³⁰ Ibid.: 3-4.

³¹ David H. McEntyre, "Homeland Security: Ready or Not, Here it Comes" (paper presented at the Minnowbrook III Conference: The Future of Public Administration, Public Management, and Public Service around the World, Lake Placid, NY, September 5-7, 2008).

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³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

³⁸ McCreight, "Educational Challenges in Homeland Security and Emergency Management."

³⁹ Council for Higher Education Accreditation, "Fact Sheet # 1: Profile of Accreditation"(2008), http://www.chea.org/pdf/fact_sheet_1_profile.pdf; The Higher Learning Commission, "The Criteria for Accreditation," chap. 3 in *The Handbook of Accreditation*, Version 1:10/03 (Chicago, IL: The Higher Learning Commission, 2003), <http://www.ncahlc.org/information-for-institutions/criteria-for-accreditation.html>.

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⁴³ Ibid., 20.

⁴⁴ McEntyre, "Education for Homeland Security – The Critical Need."

⁴⁵ McCreight, "Educational Challenges in Homeland Security and Emergency Management."

⁴⁶ Bellavita and Gordon, "Changing Homeland Security: Teaching the Core."

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⁴⁹ McCreight, "Educational Challenges in Homeland Security and Emergency Management," 4.

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⁵¹ CHDS, "2002-2008 Report."; Farr, "In Honor of CHDS."

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⁵⁴ Stanley Supinski (Address, Workshop on National Needs, Texas A&M University, College Station, TX, May 17, 2007).

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⁶⁰ Ibid., 25.

⁶¹ Bellavita, "Changing Homeland Security: What is Homeland Security?"

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