The Design of an Undergraduate Program In Homeland Security

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Abstract

The events of 2001 caused major changes to the structure of national security within the United States. With these changes came the challenge of finding individuals with the appropriate educational background to fill future positions as they became available in areas of security. This article examines the results of a study that was designed to determine the best content suited for a baccalaureate degree in homeland security.

Terrorism, according to Pfefferbaum (2002), goes beyond the obvious consequences of death, destruction, and the disruption of daily activities by instilling terror into the environment. To offset the potential threat of terrorism, the nation must be prepared. "If prepared, communities can advance recovery from a terrorist attack; when unprepared, communities may inadvertently foster fear and intimidation" (Pfefferbaum, p. 8). As a result of a continuing threat of terrorism and the development of the Department of Homeland Security, many colleges and universities initiated programs in security-related fields (Neyman, 2004). However, observers have noted the lack of needed course work for a degree in homeland security.

Purpose of the Article

The purpose of this article is to report the results of a study conducted to identify a proposed baccalaureate program in homeland security. A select group of experts served on a Delphi panel that provided a consensus of opinion on a defined list of subjects considered essential for a homeland security curriculum. With such a curriculum, institutions should be in a better position to prepare individuals to fill future positions as they became available in areas of security.

Rationale for the Study

Since World War II, the management and direction of U.S. intelligence gathering has changed and grown. Besides the National Security Agency (NSA), other government organizations have come into existence and played an important role in U.S. national security. Some of these agencies are the "National Security Council (NSC), the Defense Intelligence Agency (DIA), the National Foreign Intelligence Board (NFIB), the Central Intelligence Agency (CIA), the Federal Bureau of Investigation (FBI), the Department of State, the Department of Energy, the Department of the Treasury, the Commerce Department, and military services" (Burns, 1990, p. 1). Additionally, to protect and to defend North American airspace from threats outside the borders of Canada and the United States, the North American Aerospace Defense Command (NORAD) was established.

A reorganization for better national security was initiated by the 9/11 Commission and its 39 recommendations following the terrorist attacks in 2001. Some of the changes resulting from the 9/11 Commission's recommendations included the following: the establishment of a Director of National Intelligence, the National Counterterrorism Center, the Domestic Nuclear Detection Office, the Terrorist Screening Center, the Privacy and Civil Liberties Oversight Board, the National Targeting Center to screen imported cargo, the Container Security Initiative, and the U.S.-VISIT Entry-Exit System (National Commission, 2004). The 9/11 Commission recommendations resulted in several other key institutional developments and the prevention of several attempted or planned attacks (CNN.com, 2006; National Commission, 2004).

Throughout history, academia has played a role in educating and preparing leaders for various national agendas. For most of the past 4 centuries, numerous institutions have stepped up to the challenge to aid the United States when needed. But in 2001, a new threat presented itself, and the universities again have been asked to fill a void in preparing leaders. Smith (2005) suggested that a specialization of curriculum for homeland security had not existed previously because "a standard body of knowledge upon which instructors could readily base a curriculum" had not been available (p. 236). Pelfrey and Pelfrey (2009) conducted an evaluation review of curriculum documents and found neither a "clear educational roadmap to homeland security nor…a consensus on appropriate curricula for homeland security programs" (p. 62). According to Neyman (2004), full degree programs in homeland security have not been adopted by universities, because the value of an entire degree was not fully understood.

Writing for the Analytic Services Institute for Homeland Security, McIntyre (2002) stated that "no generally accepted curriculum [exists] for homeland security…a rigorous, sequential, and progressive program of professional education in homeland security is essential…to secure

our homeland" (p. 3). McIntyre also emphasized that a need exists to construct a curriculum that will focus on several issues that have not been addressed in the past. In an attempt to fill such a gap, this research study was performed with the intention of identifying a curriculum that would prepare professionals for employment in Homeland Security and enable them to predict threats, to provide clear and adequate measures for minimizing vulnerabilities to those threats, and to have acquired a knowledge base in the procedures for recovering from a perpetrated threat.

Summary of the Study

The researcher employed the Delphi process to identify, to validate, and to prioritize subject areas deemed important for a baccalaureate curriculum in homeland security. The Delphi technique is designed specifically to enable a researcher to obtain a consensus of opinion from an expert panel of participants without the requirement of face-to-face meetings (Dalkey, 1969). Two research questions were addressed:

1. What type of content areas should be included for a program in homeland security according to a Delphi panel?
2. What type of curriculum should be included in a baccalaureate degree program in homeland security according to a Delphi panel?

To obtain data for the study, 17 individuals were identified; based upon their position titles as directors of homeland security at the state, province, and/or territory level; to serve on the Delphi panel. In the initial round of surveys, the panel identified 77 subcontent areas that were organized into 14 groups according to similar subject content and were placed under headings related to current fields of study called major content areas. Through the subsequent three survey rounds, the Delphi panel ranked the major content areas and the subcontent areas until consensus was reached. Each member of the panel was asked to rank all the content areas according to the member's perception of the essential nature of each area for a complete curriculum. The resulting 13 subject areas that received the highest frequency count of panelists designating the subject as essential were selected as a final, workable curriculum for homeland security.

Findings

Of the 14 major content areas identified, 8 were selected as being important enough to consider for inclusion in a comprehensive homeland security curriculum program. The major content areas, listed from most important to least important as ranked by the mean, were Security Issues, Emergency Management, Risk Management, Threat Analysis, Technology, Introduction to Homeland Security, Fusion/Intelligence, and Training and Development. Major content areas rated as less important by the participants included Criminal Justice/Legal, Sciences, Theology, General Liberal Arts, Grant Management, and Industrial Hygiene.

Within these eight major content areas, 23 subjects were rated high enough to warrant consideration in a curriculum in homeland security. Because the general number of credit hours

for many majors is limited to 40 hours or less, a need to reduce or to combine the 23 subjects to a workable curriculum seemed necessary. Using the frequency count for each of the 23 suggested subject areas; the researcher excluded 10 additional subjects from the total (see Appendix for final list). A minor within a degree or even an associate's degree could also be constructed from the subcontent areas by selecting the seven subjects with the highest frequency counts: Information Sharing, History (of homeland security), Disaster Response and Recovery, Technology Intelligence, National Response Framework, Homeland Security Issues, and Vulnerability. From this list, a diverse program is still possible and would allow crossover into several fields of study, including technology, history, emergency management, security, and risk management.

Participants in this study all agreed (100%) that a curriculum in homeland security should not be focused strictly on terrorism. Approximately 90% of the participants also agreed that the curriculum should focus on "All Threats" and "All Hazards" that might be under the purview of homeland security. In addition, 85.7% of the participants agreed that the curriculum should have multiple areas of emphasis, or as one respondent suggested, areas of "concentration." The panel members offered numerous comments that a curriculum in homeland security should offer different emphasis pathways or tracks for students to pursue.

Conclusion

This study makes clear that a curriculum covering the various aspects of homeland security is needed, that such a curriculum can be developed, and that such a curriculum can be comprehensive and unified. The curriculum should be innovative and inquisitive and should be in a mode of continuous improvement, coinciding with an ever-changing world. Obviously, more subject areas were suggested than any degree program could utilize, giving some credence to the idea that multiple curriculum tracks could possibly be developed. A basic curriculum derived from the data gathered suggest a curriculum that should include courses covering each of the 13 subject areas listed in the Appendix. Even though this study has suggested a basic curriculum for homeland security, additional work is necessary, as noted by Preston, Armstrong, and McCoy (2010):

> [Educators no longer] have the luxury…to design curricula in isolated cells without checking the academic content and theory with practitioners who use it every day…[because] the practitioners…show us, as academics, what is useful and what is not….[T]heir daily struggles…should determine how we educate future HLS professionals. (p. 205)

Clearly, the process of determining a baccalaureate curriculum for homeland security should be an ongoing effort. Additional consultations and studies should be pursued with the Homeland Security Advisory Council, the National Infrastructure Advisory Council, and the Homeland Security Science and Technology Advisory Committee. Continuing the process of developing a curriculum in homeland security for higher education needs to be dynamic due to the constantly changing realm of homeland security. However, the proposed curriculum presented here is an important first step.

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FOCUS ON COLLEGES, UNIVERSITIES, AND SCHOOLS

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Appendix

Homeland Security Curriculum Subject Areas

Introduction to Homeland Security
1. History

Fusion/Intelligence
2. Information Sharing

Technology
3. Intelligence

Security Issues
4. Homeland Security
5. National Infrastructure Protection Plan

Threat Analysis
6. Vulnerability

Emergency Management
7. National Strategy
8. National Response Framework/Plan

Risk Management
9. Psychology of Terrorism
10. Disaster Response and Recovery

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