



FRAMEWORKS FOR HIGHER EDUCATION IN HOMELAND SECURITY (2004)

After the terrorist attacks on September 11, 2001, the U.S. academic community responded with an outpouring of course offerings, concentrations, certificates, and degree programs on homeland security. Programs ranging from teach-ins to first responder training to master's degree programs were developed--many without appropriate guidance or direction at the national level. It is critical to take a step back and better coordinate homeland security education programs moving forward.

Role of the Higher Education Community in Homeland Security

The content of academic programs in "homeland security" far exceeds the purview of the Department of Homeland Security, spanning areas such as public health, political science, law, ethics, military history, international diplomacy, the psychological-sociological examinations of other cultures, and comparative government systems. Accordingly, there should be a wide range of educational experiences available for individuals planning a career in the myriad of federal, state, and local agencies, non-profit organizations, and for-profit service providers engaged in homeland security work. This does not mean that an all-definitive, all-encompassing "Homeland Security University" or independent academic tracks for "homeland security specialists" should be developed.

The role of colleges and universities should focus on:

- *Access to homeland security careers for students.* Curricula should support careers in public, private, or nongovernmental (NGO) sectors.
- *Relevant content knowledge, both specialized and generalized, for those who need it.* Information concerning homeland security issues should address the needs of the students.
- *More informed citizens.* Citizens should be educated about the nature of threats and the core democratic values to be considered in devising policies for confronting these threats.
- *A forum for public debate.* The higher education sector should provide a forum for public debate and decisions on critical homeland security issues.

Structure of Homeland Security Higher Education Programs

Since homeland security involves protecting U.S. citizens against extreme, unanticipated threats, the design of educational programs for this subject should be broad and multidisciplinary, and be expected to evolve over time. Programs should consist of a core curriculum that builds an intellectual framework necessary for applying the information effectively in the field, including the following topics:

- **Risk management and analysis**—provides educational background in managing responsible resource allocation in proportion to threat probability, estimated threat magnitude, and the likelihood of improvement through corrective action.

- **Systems integration and management**—facilitates an understanding of ways of forging cooperative mechanisms among agencies addressing homeland security.
- **Social, cultural, psychological, political, historical, and operational dynamics of threats**—includes social, natural science, and humanities perspectives on issues related to roots of terrorism, its dynamic, its evolution, and its application.
- **Legal, political, and ethical issues in threat response**—provides an understanding of the psychological reactions that drive decision-making in crisis, as well as the consequences of past decisions on institutions, structures, ethnic relations, individual freedoms—and security itself.
- **Decision-making tools and processes for the management and resolution of complex problems**—may include exposure to technical tools like data networks and data mining, but may also include non-technical approaches such as forecasting/future studies and scenario planning.

This framework should be applied to the opportunities that exist both in individual undergraduate disciplines and in multidisciplinary graduate research and training. There are also opportunities to encourage executive training for those managing the homeland security strategies of institutions, regions, and nations. The following programs should be developed to educate students about homeland security:

- **Community College: Exposure to the Core**
Community colleges should focus on introducing students to some elements of the core curriculum to prepare them for more in-depth specialization at a four-year institution.
- **Undergraduate: Access to All Core Courses and Some Enrichment Experiences**
A bachelor's degree in homeland security should not be offered since it is too immature and broad; however, core coursework should be available to undergraduate students through a minor, concentration, or certificate.
- **Graduate (Certificates, Masters, Professional Masters): Core plus Specialization**
At this level certificate programs should be created, as they tend to be highly specific, typically geared toward the needs of employers, and usually accomplished within four or five courses. As this academic area develops and work force needs become more clearly defined, additional professional master's programs for homeland security studies will naturally develop.
- **Executive Training**
Shared executive training should teach students about managing, communicating, and coordinating multidisciplinary, multisectoral, multinational teams. This requires a shared strategic vision, a common culture, a mutually understood language, and an extensive network of professional contacts across many boundaries.

Finally, a multidisciplinary, multi-faceted approach to homeland security education is critical to overcome the professional and organizational divides that currently exist in the field, such as between domestic (law enforcement) and foreign (military) security or between pre-existing operations (FEMA, Office for Domestic Preparedness/Justice Dept.) now trying to work together within the same agency (DHS). This is possible since academia is not constrained by any particular government agency.

Committee on Educational Paradigms for Homeland Security

Irwin Feller (*Chair*), American Association for the Advancement of Science (AAAS)

Johnnie Carson, National Defense University

Max Houck, West Virginia University

Heather Kiriakou, Council on Foreign Relations

Arie Kruglanski, University of Maryland

Monica Schoch-Spana, University of Pittsburgh Medical Center (UPMC) Center for Biosecurity

Debra Stewart, Council of Graduate Schools

Merrilea Mayo, Director, Government-University-Industry Research Roundtable, The National Academies

For More Information

Copies of *Frameworks for Higher Education in Homeland Security* are available from the National Academy Press; (800) 624-6242 or (202) 334-3313 (in the Washington metropolitan area), or visit the NAP online at www.nap.edu. For more information on the project, contact staff at (202) 334-1399, or visit the PGA website at www.nationalacademies.org/pga.