

# *Homeland Security Affairs*

---

*Volume II, Issue 1*

2006

*Article 1*

---

## Changing Homeland Security: Teaching the Core

Christopher Bellavita\*

Ellen M. Gordon†

\*Naval Postgraduate School, christopherbellavita@gmail.com

†Naval Postgraduate School, emgordon@nps.edu

Copyright ©2006 by the authors. *Homeland Security Affairs* is an academic journal available free of charge to individuals and institutions. Because the purpose of this publication is the widest possible dissemination of knowledge, copies of this journal and the articles contained herein may be printed or downloaded and redistributed for personal, research or educational purposes free of charge and without permission. Any commercial use of *Homeland Security Affairs* or the articles published herein is expressly prohibited without the written consent of the copyright holder. The copyright of all articles published in *Homeland Security Affairs* rests with the author(s) of the article. *Homeland Security Affairs* is the online journal of the Center for Homeland Defense and Security (CHDS). <http://www.hsaj.org/hsa>

# Changing Homeland Security: Teaching the Core

Christopher Bellavita and Ellen M. Gordon

## Abstract

Homeland security is in a pre-paradigm phase as a professional discipline. There are at least four dozen ways colleges, universities, agencies, and textbook publishers have conceptualized homeland security education. A review of the principal themes presented by those entities identified over fifty topics that come under the rubric of “Homeland Security.” We do not have sufficient information about all the potential audiences for homeland security courses to say with certainty which subjects should be addressed in this field. However, we do know a lot about what is involved in homeland security. The “discipline” of homeland security is actively working to identify core ideas with which anyone who wishes to speak intelligently about homeland security has to be conversant. This article describes how the Naval Postgraduate School’s Center for Homeland Defense and Security selected particular elements within the uncertainty that is homeland security, constructed a teaching narrative around those elements, and used that understanding to fashion our continuously evolving homeland security curriculum and our Introduction to Homeland Security course.

## AUTHOR BIOGRAPHY:

Christopher Bellavita is the Director of Academic Programs at the NPS Center for Homeland Defense and Security. Prior to joining NPS, he was involved in security planning for the Olympic Games and other major domestic and international special events.

Ellen M. Gordon is Associate Director and Faculty for the NPS Center for Homeland Defense and Security. In addition to serving in this capacity, she also serves as a subject matter expert in Homeland Security and Emergency Management. Prior to joining NPS, she was the Governor’s Homeland Security Advisor as well as the Homeland Security and Emergency Management Administrator for the state of Iowa. In this position she was responsible for the development and management of homeland security and emergency management systems, to include all aspects of programs, personnel and budgeting.

**KEYWORDS:** education, curriculum, homeland security

## INTRODUCTION

This article describes one way to teach an introductory graduate course in homeland security.

Homeland security is in a pre-paradigm phase. We understand this to mean that unlike medicine, law, engineering, and other professional disciplines, there is no general conceptual agreement about the range of topics that constitute homeland security as a field of study. Consequently there is not a dominant approach to teaching homeland security. We happen to think this is a good thing.

We are aware of almost four dozen ways that colleges, universities, agencies, and textbook publishers have conceptualized homeland security education. These organizations include the National Academies, University of Connecticut, Johns Hopkins University, Long Island University, Naval Postgraduate School, U.S. Northern Command, the Department of Homeland Security, Elsevier, McGraw-Hill, and several other universities and textbook publishers.<sup>1</sup> No doubt there are others.

A cursory review of the principal themes presented by those sources identified over fifty topics that come under the rubric of “Homeland Security.” The subjects include (with the most frequently mentioned items listed first):<sup>2</sup>

- |  |   |
|--|---|
| 1. Threats to the Homeland   | 17. Civilian & Military Relationships             |
| 2. Risk Management and Analysis  | 18. Comparative & International Homeland Security |
| 3. Critical Infrastructure Protection  | 19. Federal Role in Homeland Security             |
| 4. Laws Related to Homeland Security   | 20. Future of Homeland Security                   |
| 5. Homeland Security Policies & Strategies   | 21. Preparedness                                  |
| 6. Responses to Terrorism  | 22. Private Sector Role in Homeland Security      |
| 7. Terrorism   | 23. Public Health & Medical Issues                |
| 8. Intelligence  | 24. Role of State and Local Governments           |
| 9. Overview of Homeland Security Mission Areas   | 25. Homeland Security Technology                  |
| 10. Organization of Homeland Security  | 26. Weapons of Mass Destruction                   |
| 11. Sociology of Homeland Security (e.g., politics, roles, behavior, power, conflict, communication) | 27. Critical Thinking                             |
| 12. Systems Integration and Administration of Homeland Security                                      | 28. Federalism                                    |
| 13. Border Security  | 29. Strategic Communications                      |
| 14. Cyber Security   | 30. Transportation Security                       |
| 15. History of Homeland Security and Terrorism   | 31. Basics of Homeland Security                   |
| 16. Strategic Planning & Budgeting   | 32. Civil Liberties                               |
|  | 33. Decision-Making                               |

- |   |   |
|---|---|
| 34. Ethical Issues                                  | 44. Emergency Management                          |
| 35. Interagency Coordination                        | 45. Engineering                                   |
| 36. Leadership                                      | 46. Exercises and Training                        |
| 37. Media   | 47. Geospatial Dimensions of<br>Homeland Security |
| 38. Politics of Homeland<br>Security                | 48. Human Resource<br>Management                  |
| 39. Prevention of Terrorism                         | 49. Modeling & Simulation                         |
| 40. Psychology of Homeland<br>Security              | 50. Role of Communities in<br>Homeland Security   |
| 41. Recovery After an Attack                        | 51. Role of Individuals in<br>Homeland Security   |
| 42. Risk Communications                             |   |
| 43. Utilities and Industrial<br>Facilities Security |   |

Clearly, there are a variety of subjects that can be taught in a course with “homeland security” in its title.

One might ask: where are the gaps in existing homeland security educational programs and what are the correct topics to teach? We believe it is too early in the development of homeland security to be concerned about any gaps; gaps imply a standard against which to compare a current position. Our present task should be to “let a hundred flowers blossom, let a hundred schools of thought contend.”<sup>3</sup> We do not yet know enough about who all the audiences are for homeland security courses, what their needs are, or what constitutes homeland security to say with certainty which subjects should be addressed in this field.<sup>4</sup> Again, for some of us interested in this topic, the intellectual freedom this uncertainty encourages is liberating.

That said, we *do* know a lot about what is involved in homeland security. The “discipline” of homeland security – if one can call it a discipline for the purposes of this article – is actively working to identify core ideas that anyone who wishes to speak intelligently about homeland security has to be conversant with. For us, the authors who teach at the Naval Postgraduate School’s Center for Homeland Defense and Security (CHDS), these ideas include an understanding of terrorism, homeland security laws and strategies, homeland security programs, and other topics that we include in our Introduction to Homeland Security course.<sup>5</sup>

This article describes how the Naval Postgraduate School (NPS) selected particular elements within the uncertainty that is homeland security, constructed a teaching narrative around those elements, and used that understanding to fashion our continuously evolving homeland security curriculum and our Introduction to Homeland Security course.

We fully recognize that our approach is not the only way. Nor is it in any objective sense the “best” way. It is one among several possible approaches to teaching homeland security.

## OUR ASSUMPTIONS

We start with the fundamental assumptions that have shaped the character of what we teach in the Introduction course and, to a degree, the curriculum. Some of our assumptions are unique to our institutional context. However, all homeland security

educational programs should be able to articulate the assumptions around which their programs are based.

### **Assumptions About The Sponsor**

The Department of Homeland Security (DHS) sponsors our program primarily to expand the capability of local and state government, first to prevent terrorism and second to reduce vulnerabilities and improve response and recovery. These objectives directly support the priorities of the *National Strategy for Homeland Security*. DHS wants us to educate the next generation of homeland security leaders – people who lead organizations and professions related to homeland security, and who are the intellectual and strategic leaders in this emerging field.

DHS wants the people who graduate from our program to further develop their critical thinking and creativity skills. Homeland security as a profession needs people who will contribute new ideas; people who are able to identify and critique unexamined assumptions of policy, strategy, and their own perspectives; people who have the ability to translate good intentions into effective action. Ideally, these are central traits of the next generation of homeland security leadership.

Another assumption about our sponsor is recognition that it is not our role to advocate or defend DHS policies or programs. DHS and the theories they and the Congress espouse about how to secure the homeland are but one node – albeit a critical one – in the complexity that is the nation’s homeland security network. We would do a disservice to our sponsor and our students if we allowed training to supplant our education mission.<sup>6</sup>

### **Assumptions About The Students**

The students who attend the Center for Homeland Defense and Security work in mid- and senior level government positions related to homeland security: e.g., law enforcement, fire services, public health, emergency management, and other disciplines, including homeland security. They come to the program with knowledge about homeland security, or at least about their areas of expertise in the field. The overwhelming majority of students are civilians working a minimum of fifty to sixty hours per week for state and local governments. The students are oriented more to practice than to theory, to applied knowledge rather than analysis. While many of them have advanced degrees, most of the students have been out of school for a significant number of years.

Our approach is to assume the students are *participants* in the course rather than an *audience* for what we have to deliver.<sup>7</sup> In that sense they are co-creators of what we do. We think this is an important part of our educational approach because audiences receive what is offered, participants help to shape it.

Another assumption that we have about our students is their sponsoring organizations and DHS select them because they are current leaders or next-generation homeland security leaders.

### **Assumptions About Teaching**

Teaching in the Introduction course is premised on andragogical principles as opposed to pedagogical principles.<sup>8</sup> The andragogical model has four assumptions:

1. Adults are most interested in learning about subjects that have immediate relevance to their job or personal life.
2. Adult learning is problem-centered rather than content-oriented.
3. Experience (war stories) provides a useful basis for learning activities.
4. Adults need to be involved in the planning and evaluation of their instruction.

From a student's perspective, these principles translate into five instructional directives:

1. Tell me why I need to know this, or tell me what's in this for me.
2. Let me decide how I will learn.
3. Tell me where these ideas fit in with the other things I know.
4. Sell me on learning this – make it convincing.
5. Remove the obstacles from my learning path.

### **Assumptions About Homeland Security**

We noted there are lots of ideas about what constitutes homeland security, and these ideas have not converged on any dominant paradigm. However, there is an emerging Naval Postgraduate School paradigm – pre-paradigm is a better term – outlined by the courses we teach in our master's program.

We are using paradigm here not in the jargon sense, but in its meaning as a set of related ideas that is the basis for framing knowledge and research about a topic. The NPS framework is linked, in the Introduction course, to six “Lines of Inquiry” (described later in this article) that allow students to explore the multiple dimensions that make up homeland security.

The Introduction course supports the NPS point of view of homeland security through a constructed *narrative* that outlines the terrain covered by our curriculum, and through an advocacy of twelve broad homeland security competence domains we believe are important for students to know and understand (in the sense described by Bloom's cognitive domain taxonomy).<sup>9</sup>

The narrative we use is a high level description of the ontological space within which we place our student group: homeland security leaders.<sup>10</sup>

- Homeland security leaders exist in a domain characterized by both problems and opportunities;
- That domain is further characterized by solutions that have been proposed or proven, and by visions of what could be achieved;
- The problems, opportunities, solutions and visions exist within a multi-dimensional social, political, and technical environment that influences what constitutes effective action; and
- There is an evolving set of knowledge that homeland security leaders need in order to be effective in this environment.

### **Assumptions About The Introductory Course**

Alfred North Whitehead warned against what he called the mental dry rot created by teaching inert ideas. But he also cautioned, “Do not teach too many subjects. What you teach, teach thoroughly.”<sup>11</sup> As the list of subjects noted earlier suggests, homeland security as an academic field of study is alive with new problems to explore. That presents a predicament. There is much we seek to cover in the Introduction course, but as with almost any graduate course, there is insufficient time to cover it all.

The eighteen-month master’s degree program brings students to the Naval Postgraduate School (NPS) for two weeks every academic quarter. Typically two courses are taken each quarter.

Our Introduction class is a four credit-hour course, which translates to forty contact hours with each student; twenty-eight hours in-residence (in the classroom) and twelve hours during the non-residence period (about 1.5 hours a week online). In addition to the forty contact hours, the expectation is for students to spend eighty hours over a three-month period reading, doing research, writing a strategy memo, and completing other work that supplements the contact hours. Usually the eight to ten weeks between the two in-residence sessions at NPS are used for web-based and other distance learning activities and writing a strategy memo. We also assume the Introduction course is integrated with and depends on the work students do in two other courses they take: a terrorism course and a research methods course. We rely on those courses to cover material that we do not spend much time on, but is important to achieving our overall course objectives.

Finally, given the ever-changing and growing homeland security environment, we assume that the content of the Introduction course will vary each time it is taught. As of March 2006, we have taught the Introduction course eleven times, to more than 150 students.

### **GOALS FOR THE INTRODUCTORY COURSE**

The course has two goal categories: behavioral and knowledge. They are explained in the syllabus<sup>12</sup> as well as during the presentation of the course.

From a behavioral perspective – or how we want people to be different after taking the course – we want students to expand the way they think, analyze and communicate about homeland security. We also seek to expand their mental models or schema of homeland security.

From a knowledge perspective we want them to know two general things: their level of knowledge in twelve domains and at least a preliminary understanding of homeland security basics.

### **Twelve Competency Domains**

The first year the Center for Homeland Defense and Security was in operation, we asserted – based on practitioner experience and on empirical evidence<sup>13</sup> – that effective homeland security leaders should be able to demonstrate competency (i.e., have knowledge, skills and abilities, as appropriate) in at least twelve substantive areas:

1. The historical forces that spurred the changes in U.S. strategy, policy and organizational design since September 11, 2001.

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

As we gain more experience, our understanding of, and indicators for, competencies also change. This process will be continuous. We do not suggest that these competencies have universal applicability throughout homeland security. However, we do think they are candidate topics for a conversation about the core ideas in homeland security professional education.

### **Specific Subjects**

What we described above is the general knowledge framework that informs our program. While we do not provide an in-depth treatment of all of these topics in the Introduction course, we do cover all of them in our master's degree curriculum. We use our understanding of the broader NPS homeland security knowledge framework as a basis for selecting specific topics to discuss in the Introduction class, and make reference during the class discussions to future courses the students will take.

We strive to cover certain topical areas in the Introduction class which represent the minimum students should know before they engage in more advanced homeland security study. The areas include:

- The policy objectives of the nation's homeland security efforts.
- The national strategies for achieving that policy.
- The implications of the national strategy for state and local homeland security strategies, especially with respect to prevention.
- The basic vocabulary of homeland security.
- The variety of forces that help and hinder efforts to achieve the homeland security strategy (for us, these forces can be represented as a series of concentric circles that include – starting from the inner-most element – personal, techno/rational, economic, legal, organizational, political, cultural, information, decision-making, change, network, and leadership).
- The role that leadership plays in achieving strategy.
- How individual, organizational, and social learning affect achieving the strategy.
- The fundamental concepts and theories that are relevant to a leader's understanding of how to be effective in homeland security environments. This means how ideas are translated into policy and strategy; how to be effective as a *network* leader.
- The nature and scope of significant homeland security issues and concerns, their causes and consequences. We tend to emphasize different issues each time we teach the course, using them as opportunities to emphasize our core themes.
- Causes, consequences, tactics and logics of terrorism (taught in the companion course).
- The major solutions proposed for homeland security issues and concerns, and the pros and cons of the solutions.
- The organizational implications of homeland security policies and strategies.
- The disciplines, processes, and critiques that constitute the emerging profession of homeland security.<sup>14</sup>

## HOW WE CONDUCT THE INTRODUCTION COURSE

The Introduction course is divided into four phases:

1. Pre-in-residence
2. First in-residence
3. Non-residence
4. Second in-residence

We have specific objectives for each phase.

### Pre-In-Residence

We start working with our students as soon as they are admitted into the program, typically six to eight weeks before their first in-residence session. We contact them via e-mail to begin their online work. We provide readings about the past, present, and future of homeland security, as the basis for an initial online conversation about homeland security.

In the pre-in-residence we familiarize them with “posting” their conversations online, specifically working with the concept of the “usable idea,” – tying into their intellectual and professional predisposition towards application, and exploring the “critical question” – getting them to move conceptually from application to analysis. All of the online work (questions and responses) is visible to everyone in the class. Our intention is to create a dialogue about homeland security experiences and ideas and, in the process, to begin building a learning community. Students are not graded on what they post. We comment on the ideas in a collegial way, and encourage their classmates to do the same. We use the material they produce – the usable ideas and the critical questions – as material for exercises and discussions during the first in-residence.

### First In-Residence

During the first in-residence session we emphasize five of the core ideas in our curriculum:

- Prevention – It is the first priority of the *National Strategy*.
- Strategy – Our program concentrates more on homeland security strategy than on homeland security operations.
- Leadership – Our mission is to educate homeland security leaders.
- Critical analysis – We want students to identify assumptions and know how to use evidence to inform action.
- Creativity – We want students to see homeland security more as a canvas to paint on than a puzzle to be solved.

After an initial two hour “Introduction to Homeland Security” lecture, where we outline the knowledge framework, we work the ideas noted above through a series of exercises based on readings, experiences, the NPS homeland security narrative, competencies, and topical homeland security issues.<sup>15</sup> The exercises include:

- A *tabletop exercise*, designed as a sort of Rorschach Test about the homeland security perspectives students bring to the program.<sup>16</sup> Most of the time we use video vignettes illustrating an element in the cycle of homeland security preparedness. Videos are not needed, however. One can conduct a tabletop exercise using a case study,<sup>17</sup> or any hypothetical or actual homeland security-related situation.<sup>18</sup>
- An *emergence* exercise about homeland security leadership. This exercise is intended to illustrate the self-organizing property of systems in homeland security.<sup>19</sup>

- A *debate* about a current homeland security issue.<sup>20</sup> The debate emphasizes critical analysis, and models the skills we want the students to use during the strategy briefings in the second in-residence session. The debate is also an opportunity to conduct policy-relevant research, using the CHDS/DHS Homeland Security Digital Library.<sup>21</sup>
- A *force field analysis* about how things actually happen in homeland security. This exercise is designed to reinforce the concept of critical thinking, and to emphasize significant forces in the homeland security environment that influence a leader's effectiveness.
- A homeland security *futures analysis*, intended to model how one can conceptualize a desired future by focusing on critical environmental variables. It is also a prelude to a "Weak Signals" exercise we conduct during the non-residence session.

At the end of each day's class, we take time for something called a one-minute feedback. We ask students to write a brief comment about an idea that was interesting, something that was unclear, something they disagreed with, or other feedback about the day.<sup>22</sup> The next day we respond to their comments as appropriate.

### **The Non-Residence Session**

A dedicated course website is used to conduct the non-residence session. Students have four tasks to complete during the eight to ten weeks of the non-residence session: Learning Activities, Weak Signals, Question of the Week, and a Strategy Memo.

- **Learning Activities:** The learning activities are based on an expanded homeland security narrative that we discuss on the course website. Depending on the structure of the course during a particular quarter, we use one of two types of learning activities. The first kind involves Lines of Inquiry (or LOI), described in more detail below. The second kind involves Questions of the Week.
- **Weak Signals Blog:** The blog, and the purpose of the weak signals exercise, are explained below.
- **Question of the Week:** We use a short version of this activity when we use the Lines of Inquiry as the centerpiece of the non-residence experience. When we are not using the Lines of Inquiry, we do an extended Question of the Week exercise. This activity is described later in this article.
- **Strategy Memo:** This seminar paper is a memo designed to address a real-world strategic problem that the student selects.

### ***The Learning Activities***

A primary non-residence objective is for each student to complete thirty-five points worth of learning activities. Learning activities are problems or questions based on the topics covered in the course. Students can select from among 400 activities.<sup>23</sup>

An average learning activity is worth between two and three points. Most require completing a short essay (from 200 words to two pages). Students post their responses on the web site, and we make those responses available for everyone to read.

Each week the instructors select posts that reflect what we are trying to achieve in the course, particularly on prevention, strategy, leadership, critical analysis, and creativity. We also look for posts that communicate ideas well. We send a weekly message to students telling them about our selection. We choose posts that model what we are looking for.

Using the grade book feature of the course web site we provide individual comments to students on their posts – comments that are only visible to the students. The comments are on the substance of their response and communication and analytical styles. Rather than giving a letter grade, we provide a critical analysis of their posts, and tell them how many points they have earned for a particular post.

Learning activities are drawn from material covered during the first in-residence and from material contained on the web site, and in the readings. When we use learning activities as the centerpiece of the non-residence period, we divide the activities into six Lines of Inquiry. (“Line of Inquiry” is a phrase we use to describe one way homeland security material can be organized.) The Lines of Inquiry are:

1. *Homeland security basics* – the minimum an educated homeland security professional should know. As noted above, this includes knowing about the events, incidents, and forces that gave rise to the need for “homeland” security; the contents of the *National Strategy for Homeland Security* and the other national strategies that support and complement the national strategy; the relationship between state and local homeland security strategies and the *National Strategy*; the structure of homeland security in the United States, from the perspective of federalism; the basic statutes that shape homeland security’s legal terrain; the contents of Homeland Security Presidential Decision Directives; the national guidelines and procedures that structure how homeland security strategy and policy are implemented; the reports and other documents that have significantly influenced the homeland security debate about policy and strategy; how homeland security resources are allocated; and the terms used in the discipline of homeland security.
2. *The mission* – preventing terrorism; why we are doing that and what is meant by prevention.
3. *Strategies* – options for accomplishing the mission.
4. *Frameworks* – analysis of how things happen in the world of homeland security. Most of the homeland security basics and information about the mission and strategies are espoused theories, predictions about the outcomes that will occur if certain activities are undertaken. The Frameworks Line of Inquiry draws attention to ideas about how things actually happen in the world (somewhat equivalent to “theories-in-use”). This module includes information about the environmental variables outlined earlier in this paper: personal, techno/rational, economic, legal, organizational, political, cultural, information, decision-making, change, network, and leadership.

5. *Leadership* – especially in a networked, non-hierarchical, multi-agency, multi-sector, multi-professional environment. Essentially this is an environment where command and control does not operate very effectively.<sup>24</sup>
6. *Learning* – how experiences can continuously be transformed into homeland security knowledge. This element is designed to underscore the need for life-long learning in homeland security.

Here's how the Learning Activities work in an andragogical context. The student starts with something he or she is interested in – let's say Homeland Security Presidential Directive 5, and the National Incident Management System (NIMS) implementation it mandates. The student reads information about the homeland security presidential decision directives, reads HSPD-5 and related implementation documents, and then completes a learning activity – for example, an essay about how HSPD-5 affects his or her agency – based on the research he/she has conducted.

In our feedback to the student's learning activity, we may ask why the student thinks HSPD-5 is a strategy. This potentially leads the student to want to learn more about what a strategy is, and then he or she explores the readings and links we suggest about the concept of strategy, critiques of existing strategy, and so on. This can then lead the student to complete another learning activity about a related topic, e.g., why strategy is such a difficult concept for people to understand, or how to get their agency to focus more on strategy.<sup>25</sup> Or the student may follow a different path, and the initial exploration of HSPD-5 might lead the student to want to know more about NIMS, so he or she completes the DHS online NIMS course as a learning activity.<sup>26</sup>

If they do not like any of the learning activities we offer, they have the option of designing and completing their own activity.

We obviously do not expect students to complete all 400 learning activities or all lines of inquiry in one course. We look for them to become familiar with the material so they can go back to it during their eighteen months at NPS. Students typically are able to complete required learning activities within the time allotted for the non-residence period.

### ***The Blog***

We have a weblog called "Changing Homeland Security." Students (either as individuals or as small groups) are asked to post three "weak signals" about homeland security during the non-residence period. Weak signal is a term that describes ideas or issues just below homeland security's strategic horizon. The purpose of the weak signals exercise is to acquaint the students with looking at future issues and trends. Weak signals have the following characteristics:

1. They indicate the potential for change, rather than mainstream thinking.
2. They relate to strategic themes in homeland security.
3. They have the potential to be wild cards or to portend low probability/high consequence events, incidents, or environmental shifts that could affect homeland security.
4. They can suggest strategic blind spots.

We have been using the weak signals blog for almost two years, so we have many examples of effective and ineffective posts. In weekly messages to students, we identify one or more exemplary blog posts of the week – another way we model what we are looking for as students learn to see beyond the mainstream.

### ***Question of the Week***

We use the Question of the Week exercise to continue the homeland security dialogue that started during the first in-residence session. When we use the Lines of Inquiry activity, participation in the Question of the Week is voluntary, but it is part of the participation score. For the most recent Introduction course, we used the following questions during the eight week non-residence session.

1. Select one of the homeland security presidential decision directives (HSPD) and identify how it has affected your agency or jurisdiction. In your response, identify the problems and opportunities created by the HSPD.
2. The purpose of this assignment is to conduct a summary assessment of your state or community's homeland security strategy. Starting with the criteria suggested in the attached GAO report,<sup>27</sup> identify the strengths of your selected strategy and areas where the strategy could be improved. Briefly discuss what has to happen before those improvements are made.
3. Prevention is the first priority of the nation's homeland security strategy. As the two quotations below suggest, we continue to spend more attention and money on response than on preventing terrorism. Why is this, and what – if anything – can we do about it? In a post-Katrina world, is it still appropriate that prevention is our first priority?

*We've got to have a prevention strategy that is focused on finding those terrorists before they act. Very little, I will hasten to add, of what the Department of Homeland Security spends its money on these days is devoted to what ought to be a high priority. We've got to reconfigure in order to do that. – Christopher Cox, (former) Chairman of the House Committee on Homeland Security, May 2005*

*The Committee is concerned that while terrorism prevention is a national priority, little is being done to create prevention expertise in our nation's first responders. This is in stark contrast to response and recovery training programs. Without a well-developed terrorism prevention plan, State and local agencies lack a key piece in the fight against terrorism. – House Appropriations Subcommittee on Homeland Security, June 2004*

4. One of the few consistent findings in homeland security is that effective collaboration is the foundation of success. Early lessons from both the Katrina and the Rita events suggest pre-event collaboration is also a significant determinant of effectiveness during the response and recovery

phases of incident management. There is a need to understand how we can be more successful in our collaboration efforts. Think about a specific homeland security (or related) effort that included at least two other agencies or organizations that you consider to have been a successful collaboration. Whenever possible, use an effort that was oriented to preparedness or prevention, not to response. Write a brief narrative of the event, including the names of the primary organizations that were involved in the collaboration. Rank order three key factors that contributed to the success of the collaboration (1 = most critical success factor). Finally, provide a brief explanation about why the critical success factors mattered.

5. Information sharing is one of the five core elements of the DHS prevention guidelines. Reports from the 9/11 Commission, the Markle Foundation, and other groups point to the importance of appropriately sharing the right information with the right people and agencies. The aim of this week's assignment is to identify factors that help and hinder information sharing among agencies and professions. Select two examples from your experience: one example of successful information sharing and one example that illustrates the lack of effective sharing. What factors explain the success of the first example? What factors account for the less successful second example?
6. In March 2005, Secretary Chertoff said, "We need to adopt a risk-based approach in both our operations and our philosophy. Risk management is fundamental to managing the threat, while retaining our quality of life and living in freedom. Risk management must guide our decision-making as we examine how we can best organize to prevent, respond and recover from an attack." Risk assessment has been described as the study of vulnerabilities, threats, likelihood, and consequences. It is also one of the first steps in the risk management process. Prepare a brief memo to your boss explaining what a "risk-based approach" to homeland security means and how it can help or hinder your agency's work. As a part of your memo, describe what a "risk assessment" is; use examples and language that are relevant to your agency or discipline.
7. In Eugene Bardach's *A Practical Guide for Policy Analysis*, he suggests that, "Rarely will you have any confidence that some helpful-looking practice is actually the 'best' among all those that are addressed to the same problem." He suggests the term "smart practice," because the activity being studied has something worth analyzing that is applicable to a problem. Bardach further notes that "a practice is ... an expression of some underlying idea – an idea about how the actions entailed by the practice work to solve a problem or achieve a goal."<sup>28</sup> The purpose of this assignment is to identify something that you consider to be a "smart practice" in homeland security. Describe what the practice is, why you believe it merits the title "smart practice," and what the core idea is that is embodied in the practice. You can look to your own experience for "smart

practice" ideas, or you can locate some examples on the DHS lessons learned website (<https://www.llis.dhs.gov/>).

8. James McGregor Burns distinguished between transactional and transformational leadership. In a recent survey of 243 California police chiefs and sheriffs, 94% of the respondents indicated that transformational leadership is needed to meet the challenges of homeland security. The study further notes "these law enforcement leaders were nearly unanimous in their belief that even though transformational leadership is required, very few practiced it."<sup>29</sup> For this week's assignment, we would like you to identify ten principles or guidelines for a transformational homeland security leader. At the end of your list, discuss how and why the principles are transformational rather than transactional.

### **Second In-Residence Session**

Presentation of the strategy memo is the centerpiece of the second in-residence session.

Students are asked to select a homeland security topic of interest and devise a strategy for the topic they identify. The memos, developed during the non-residence period, are restricted to ten pages and assessed according to our program's research paper guidelines.

Students are given thirty minutes to brief their memo (using no more than three Power Point slides). They have ten minutes to present, and twenty minutes to respond to questions. To enhance the learning process, the students who are listening to the presentation provide a rigorous critique to the argument in the strategy memo.

In addition each student provides an e-mail to the presenting student that identifies strengths and weaknesses of the briefing – for both content and style.

A number of these strategy memos have been implemented by sponsor organizations.

### **THE FUTURE OF THE INTRODUCTION COURSE**

Beyond continuously revising existing content, there are three areas where we are working to improve the course:

1. Knowledge Gap Analysis: Development of a questionnaire/survey of homeland security knowledge based on the NPS knowledge framework and competencies. Before the students start the Introduction course, we will ask them to complete the questionnaire. Responses will identify participants' "start states." The answers will be used to identify what they know, and more importantly their knowledge gaps. This gap analysis will assist each student in developing an individual learning program. At the end of the eighteen-month course of study, students will again complete the questionnaire to identify the significant, and positive, change.
2. Program Integration: Better integrate the introductory material of each of the program's courses into the Introduction course. We plan to do this by expanding what we do online during the non-residence period.
3. Expand the Role of Student Expertise: Use wiki technology to have students – many of whom are already homeland security experts in a particular domain – serve as co-authors of the online homeland security content. Wiki is an acronym

for "what I know is" and is a way to write collaboratively. There are numerous examples of wiki collaborations.<sup>30</sup>

## **COURSE OUTCOMES**

The DHS-required external evaluation is a central feature of the Center for Homeland Defense and Security master's degree program. It is the formal method we use to assess whether the Introduction course – and our curriculum – makes a difference.

The students are asked by an independent evaluator to assess each course. Instructors receive detailed quantitative and qualitative feedback on how well – over the three-month quarter – they achieved course objectives, reaction to the course readings, lectures, exercises, assignments, guests and other parts of the course. That evaluation makes a foundational contribution to the continuous improvement we aim for.

In addition to the formal evaluation results, we have noted four consistent outcomes of the Introduction course:

1. Minds expand. Participants learn that homeland security is more than they thought it was before they came into the program.
2. Students learn "perspectives." They learn their discipline, agency, or level of government is not the center of the homeland security universe. They learn the critical importance of interagency and interjurisdictional collaboration. They and their colleagues really are in all of this together. This outcome is one basis for our belief that homeland security can become an intellectual and professional discipline.
3. The participants rediscover the nature of critical thinking, imagination, strategy and leadership.
4. The participants start to create organizational, strategic, or policy change in their homeland security environment.

When the Introduction course works the way we envision it should work, participants grow out of their old cognitive structures. Many of them start to perceive themselves as homeland security leaders. They acknowledge that they are directly responsible for what happens in this new professional and policy domain. They stop being the audience. They begin to be the author of what happens next in homeland security.

<sup>1</sup> The primary sources we reviewed were: National Research Council of the National Academies, *Frameworks for Higher Education in Homeland Security* (Washington, D.C.: National Academies Press, 2004); Unknown, *Proposal for New Instructional Program: Master of Science - Homeland Security Leadership* (Baltimore, MD: Johns Hopkins University, 2005); Vincent Henry, *Course Descriptions - Homeland Security Management Courses* (New York: Long Island University, 2005); University of Connecticut, College of Continuing Studies, *Master of Professional Studies - Homeland Security Leadership* ([http://continuingstudies.uconn.edu/onlinecourses/programs/homeland\\_security.html](http://continuingstudies.uconn.edu/onlinecourses/programs/homeland_security.html)); Stan Supinski, *HLS/HLD -- Training and Education Spectrum* (Battelle, 2006). Department of Homeland Security, *Multiple Fairways: Developing a Strategic Studies Program for the Department of Homeland Security* (Conference Report Charting a Course for Homeland Security Strategic Studies, New London, Connecticut, 15-18 November, 2004); Jane A. Bullock, et al., *Introduction to Homeland Security* (New York: Elsevier Butterworth-Heinemann, 2004); Mark A. Sauter and James Jay Carafano, *Homeland Security: A Complete Guide to Understanding, Preventing, and Surviving Terrorism* (New York: McGraw-Hill, 2005); Robert W. Smith, "What Is 'Homeland Security?' Developing a Definition Grounded in the Curriculum," *Journal of Public Affairs Education* 11, no. 3 (2005): 233-46; The National Academies report, *Frameworks for Higher Education in Homeland Security*, includes information about thirty-two homeland security education programs.

<sup>2</sup> The list is based on a review of the topics included in the Reference 1 sources. The list was generated by counting the number of times a particular subject was mentioned as a primary topic (i.e., in a hierarchy of items, for example, the topic was at the top rather than at a subordinate level). The first item on the list – "threats" – was mentioned by nine of the sources listed in Reference 1; the second item was mentioned eight times; items 3 through 7 were mentioned seven times; 8 through 12 received six mentions; 13 through 16 were mentioned five times; items 17 through 26 were mentioned four times. The remaining items received from one to three mentions.

<sup>3</sup> "Letting a hundred flowers blossom and a hundred schools of thought contend is the policy for promoting progress in the ... sciences.... [I]t is harmful to the growth of ... science if administrative measures are used to impose one particular ... school of thought and to ban another. Questions of right and wrong in ... science should be settled through free discussion in ... scientific circles and through practical work in these fields. They should not be settled in an over-simple manner." Mao Tse-tung, "On the Correct Handling of Contradictions among the People," in *The Selected Works of Mao Tse-tung*, Vol. V (Peking, China: Foreign Language Press, 1957), [http://www.marxists.org/reference/archive/mao/selected-works/volume-5/mswv5\\_58.htm](http://www.marxists.org/reference/archive/mao/selected-works/volume-5/mswv5_58.htm). Mao was talking about handling contradictions in a socialist society, but his point has relevance for homeland security – unlike Mao's suggestion in the same commentary about what to do with people who disagree with mainstream ideas: "What should our policy be towards non-Marxist ideas?" he asked. "As far as unmistakable counter-revolutionaries and saboteurs of the socialist cause are concerned, the matter is easy, we simply deprive them of their freedom of speech."

<sup>4</sup> National Research Council of the National Academies, *Frameworks for Higher Education in Homeland Security*, p. 13-18 provides constructive ideas about potential approaches to homeland security education that may be appropriate for community colleges, undergraduate education, graduate education, and executive education.

<sup>5</sup> The Introduction course is co-taught by the authors. The academic and professional backgrounds of the two instructors influence the course. One instructor is a person with academic and practitioner experience. The other instructor is a national leader in emergency management and homeland security. The mix of academic and practitioner instructional perspectives affects the way the course material is selected and presented.

<sup>6</sup> There frequently are discussions about the difference between homeland security training and education. Several aphorisms illustrate the range of perspectives on the issue. “There is no essential difference between training and education.” “You train for the known, you educate for the unknown.” “Training is for shaping your mind so others can use it, education is for shaping your mind so you can use it.” “Training that is done in the cognitive domain is generally at the knowledge level and lower part of the comprehension level. Education ... concentrates instead on the higher cognitive levels, i.e., high comprehension and above.” Authors of the first three quotes are unknown. The source of the last quote is John A. Kline, “Education and Training: Some Differences,” *Air University Review*, January-February 1985, <http://www.airpower.maxwell.af.mil/airchronicles/aureview/1985/jan-feb/kline.html>

<sup>7</sup> For a brief discussion of the distinction between these two terms see Doug Brent, “Teaching as Performance in the Electronic Classroom,” in *First Monday* (2005) [http://firstmonday.org/issues/issue10\\_4/brent/index.html](http://firstmonday.org/issues/issue10_4/brent/index.html) (accessed March 27, 2006).

<sup>8</sup> The classic statement of the andragogical philosophy is Malcolm Shepherd Knowles, *The Adult Learner: A Neglected Species*, 3rd ed. (Houston, TX: Gulf Publishing Co., 1984). The andragogical model is used in the Introduction course; it is not used explicitly in all of the NPS/CHDS courses.

<sup>9</sup> Benjamin S. Bloom, *Taxonomy of Educational Objectives: Handbook I: Cognitive Domain* (New York: David McKay Co. Inc., 1956). The competencies are described later in this article. They include history, terrorism, communication, threats, leadership, comparative governments, weapons of mass destruction, civil liberties, intelligence, analysis, technology, and strategy.

<sup>10</sup> While the description could be applied to almost any leadership program, the specific and detailed homeland security linkages in this narrative emerge within each homeland security course.

<sup>11</sup> Alfred North Whitehead, *The Aims of Education* (New York: The Free Press, 1929).

<sup>12</sup> For a copy of the most recent syllabus for the Introduction to Homeland Security course, please send an email request to [cbellavi@nps.edu](mailto:cbellavi@nps.edu).

<sup>13</sup> The initial evidence was presented in William V. Pelfrey, William D. Kelley, and John May, *The Office for Domestic Preparedness Training Strategy*, Office for Domestic Preparedness, U.S. Department of Justice (2003).

<sup>14</sup> In this context, processes unique to homeland security include such activities as the National Incident Management System, National Response Plan, Target Capabilities List, etc.

<sup>15</sup> The last time we taught the course, the Katrina response was still in its early days. It was, obviously, a major topic for discussion and was readily incorporated into the Introduction course.

<sup>16</sup> There are many variations of tabletop exercises. At its most rudimentary, a tabletop exercise consists of people presented with a scenario; they are then asked, “What would you do if this happened?” There are, of course, more complex ways to conduct a tabletop.

<sup>17</sup> See, for examples, the Kennedy School of Government case studies on “terrorism” at <http://www.ksgcase.harvard.edu/>.

<sup>18</sup> For example, the October 2005 Baltimore Harbor Tunnel incident (see <http://www.baltimoresun.com/news/custom/attack/bal-te.md.threat19oct19,0,2973598.story?coll=bal-attack-headlines>) could be used as the basis for an exercise.

<sup>19</sup> The notion of emergence we use in the exercise is described in Steven Johnson, *Emergence* (New York: Touchstone, 2001), and in Albert-Laszlo Barabasi, *Linked: The New Science of Networks* (Cambridge, Massachusetts: Perseus Publishing, 2002).

<sup>20</sup> During the last Introduction course, the debate topic was the DHS 2006 homeland security grant allocation strategy.

<sup>21</sup> For information about the Homeland Security Digital Library and how to gain access, please go to <http://www.hsdl.org/>.

---

<sup>22</sup> Each class session lasts four hours.

<sup>23</sup> For a copy of the learning activities, please send an email request to cbellavi@nps.edu.

<sup>24</sup> On this point, see Charles Perrow's comment in his article in this issue of *Homeland Security Affairs*: "Coordination can be achieved through centralized control in small and moderately sized and homogeneous agencies, but mammoth projects [like homeland security] are almost impossible to coordinate through centralization. Mammoth agencies require a great deal of decentralization because of the diverse tasks and skills involved. *Decentralized systems are coordinated not by giving central orders but by signaling intent and making sure that information is shared.*" [Emphasis added.]

<sup>25</sup> One student followed the line of inquiry noted in this example, and ended up revising the homeland security strategy for his city.

<sup>26</sup> During the non-residence session, we typically receive between forty and fifty posts a week to read. This takes six to seventeen hours a week to review, provide comments, and score.

<sup>27</sup> The GAO document referred to in the assignment is United States General Accounting Office, *Combating Terrorism: Evaluation of Selected Characteristics in National Strategies Related to Terrorism*, (2004).

<sup>28</sup> Eugene Bardach, *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving* 2<sup>nd</sup> ed. (Washington, D.C.: CQ Press, 2004), 91.

<sup>29</sup> Patrick Miller, "How Can We Improve Information Sharing among Local Law Enforcement Agencies?" (master's thesis, Center for Homeland Defense and Security, Naval Postgraduate School, 2005).

<sup>30</sup> The most prominent example is Wikipedia, at <http://www.wikipedia.org/>. It is our intention to keep the wiki restricted to a comparative handful of students and selected other professionals since, as Nicholas Carr notes in his *Law of the Wiki*, "Output quality declines as the number of contributors increases. Making matters worse, the best contributors will tend to become more and more alienated as they watch their work get mucked up by the knuckleheads, and they'll eventually stop contributing altogether, leading to a further fall in quality." [http://www.routhtype.com/archives/2005/10/the\\_law\\_of\\_the.php](http://www.routhtype.com/archives/2005/10/the_law_of_the.php)

---

## REFERENCES

Barabasi, Albert-Laszlo. *Linked: The New Science of Networks*. Cambridge, Massachusetts: Perseus Publishing, 2002.

Bloom, Benjamin S. *Taxonomy of Educational Objectives: Handbook I: Cognitive Domain*. New York: David McKay Co. Inc., 1956.

Brent, Doug. "Teaching as Performance in the Electronic Classroom." *First Monday* 10, no. 4 (2005).

Bullock, Jane A., et al. *Introduction to Homeland Security*. New York: Elsevier Butterworth-Heinemann, 2004.

Sauter, Mark A. and Carafano, James Jay. *Homeland Security: A Complete Guide to Understanding, Preventing, and Surviving Terrorism*. New York: McGraw-Hill, 2005.

Department of Homeland Security. "Multiple Fairways: Developing a Strategic Studies Program for the Department of Homeland Security." *Conference Report: Charting a*

- 
- Course for Homeland Security Strategic Studies*. New London, Connecticut: November 2004, 15-18.
- Henry, Vincent. "Course Descriptions - Homeland Security Management Courses." Long Island University, 2005.
- Johnson, Steven. *Emergence*. New York: Touchstone, 2001.
- Knowles, Malcolm Shepherd. *The Adult Learner: A Neglected Species*. 3rd ed. Gulf Publishing Co., 1984.
- Mao Tse-tung, "On the Correct Handling of Contradictions among the People," in *The Selected Works of Mao Tse-tung*, Vol. V. Peking, China: Foreign Language Press, 1957. [http://www.marxists.org/reference/archive/mao/selected-works/volume-5/mswv5\\_58.htm](http://www.marxists.org/reference/archive/mao/selected-works/volume-5/mswv5_58.htm) (accessed March 15, 2006).
- National Research Council of the National Academies. *Frameworks for Higher Education in Homeland Security*. Washington, D.C.: National Academies Press, 2004.
- Pelfrey, William V., William D. Kelley, and John May. "The Office for Domestic Preparedness Training Strategy." edited by Office for Domestic Preparedness U.S. Department of Justice, 2003.
- Smith, Robert W. "What Is 'Homeland Security?' Developing a Definition Grounded in the Curriculum." *Journal of Public Affairs Education* 11, no. 3 (2005): 233-46.
- Supinski, Stan. *HLS/HLD -- Training and Education Spectrum*. Battelle, 2006.
- United States General Accounting Office. "Combating Terrorism: Evaluation of Selected Characteristics in National Strategies Related to Terrorism." 2004.
- Unknown. "Proposal for New Instructional Program: Master of Science - Homeland Security Leadership." Baltimore, MD: Johns Hopkins University, 2005.
- Whitehead, Alfred North. *The Aims of Education*. New York: The Free Press, 1929.