The Case to Accredit Homeland Security Programs: Why Outcomes-based Accreditation Makes Sense

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ABSTRACT

The following essay lays out an argument for program level accreditation in academic homeland security (HS) programs. Admittedly, neither the practice nor the educational components of the HS discipline are standardized. Indeed, a recent analysis by the Congressional Research Service indicates that there remain several operational definitions of HS in practice. Regardless, this paper provides rationale which argues that after roughly eight years, academic HS has developed enough to be able to identify and support a distinct set of student learning outcomes—knowledge, skills and attitudes—that can both characterize and define the discipline.

Generally, program level academic accreditation requires a discipline to have identified and vetted a set of student learning outcomes. Academic programs, in turn, integrate this set of outcomes into their core curriculum and students of a given discipline acquire a common set of knowledge, skills and attitudes deemed central to their discipline regardless of where they are educated. Hence program level accreditation works proactively and continuously to address questions about degree integrity, professional competence, truth in advertising, professional boundaries, certification, licensure, quality improvement and control. Without accreditation it remains extremely difficult for a discipline to demonstrate true legitimacy since anyone would be able to teach anything they want. Indeed by extension, one might easily argue that so long as such questions are unanswered, there can be no discipline. Further, for true professional legitimacy to accrue, even when a discipline is able to identify, vet and develop a defining set of student learning outcomes, it still needs to integrate them into a recognized accreditation process and then develop incentives for academic programs to adopt accreditation into a wide spread practice in higher education. Indeed, these last two challenges characterize several related disciplines (such as occupational safety and health, emergency management, intelligence studies, criminal justice, cybersecurity, etc.). Ultimately, critical to the ongoing maturation and legitimization of the HS profession is the need to develop and pursue program level accreditation.

INTRODUCTION

Homeland security education has become very popular among college campuses in the last eight or so years. The University Agency and Partnership Initiative (UAPI, 2012) at the Naval Post Graduate School maintains a responsible list of

current programs in homeland security (HS) at the associate's degree, undergraduate and graduate degree levels. In June of 2006 UAPI listed fewer than 25 academic programs in HS and they list over 400 now (UAPI, 2012). However, though academic programs in HS have flourished, the body of knowledge as what should and should not be in an HS academic program has developed more slowly. There have been several articles published over the years that discuss the lack of standardization in HS, the lack of a unified definition of HS (Reese, 2013; Bellavita, 2008), and the relative lack of theoretical development in HS (Bellavita, 2012). In addition, conventional wisdom holds that the discipline of HS lacks licensure, certification, and accreditation, each of which are historically linked to well-developed, mature disciplines such as medicine, nursing, law, engineering, public administration, among others.

What follows is an attempt to build a case for outcomes-based, program-level accreditation in academic homeland security programs. As most know, or at least suspect, academic program accreditation is oft cited as a quality control measure, and indicator of peer review and professional responsibility in higher education (ABET, 2013; Council for Higher Education Accreditation, 2002). However, accreditation is a very broad term and includes many types and levels of application. Consequently accreditation means different things to different people. In addition, the term is known to engender thoughts of elitism, undue barriers to entry and exclusion to some, excess expense and effort to others, and still to others, may indicate a measure of sanctification, somewhat like the "USDA approved beef" stamp of approval for high quality programs. This paper does not present accreditation as a perfect device or panacea to the challenges that face HS education as it continues to grow, evolve and mature. Indeed, the author is not aware of any social device that can guarantee human behavior. Like most social constructs, accreditation has its limits; however, one might observe from other, more mature professions, that as a systematic and performance-based process, program-level accreditation can enable faculty, programs and students to more efficiently obtain the abilities, skills and knowledge required by their profession. Such efficiency has its roots in free market economics. This is to suggest that accreditation allows for more perfect information exchanges between the suppliers of education (academic programs, faculty) and the consumers of education (the private and public sector entities that hire graduates) and students (those who purchase education). In addition, accreditation enables market efficiency in at least three ways. First, programs can be more efficient because accreditation lessens the likelihood of a program developing courses or concentrations not of interest to education's consumers and constituents. Second, constituents and consumers can act more efficiently in the marketplace since they absorb graduates who are more likely to be more completely educated and who are better trained. Third, academic providers adhering to the process of outcomes-based education can more completely engage in continuous quality improvement by virtue of the assessment and reporting requirements inherent in accreditation which in turn keep the faculty appropriately credentialed, and the outcomes current, and relevant.

Following a brief discussion about outcomes-based education and the nature of program-level accreditation, the paper will present a summarized list of the salient, positive attributes and characteristics that program-level accreditation can offer, and consequently why it is logical and prudent to build program-level accreditation architecture into academic homeland security programs at this time. The paper concludes with a set of questions to guide future research in HS education.

Outcomes-based education enables outcomes-based accreditation. Over the last twenty years, academic accreditation has evolved and moved away from a rigid process orientation (i.e., a required list of courses) and toward a set of outcomes that represent behaviors, skills, and knowledge practitioners need to possess in order to function effectively in their profession. Many professions engage the literature and practitioners as well as regulators when devising a list of student learning outcomes they wish to describe (if not define) the discipline. As such, outcome-based academic programs are incentivized to work in closer partnership with their professional constituents and to concentrate on teaching/evaluating their students on outcomes that matter to practitioners. Outcomes-based accreditation is legitimated by its basis in outcomes-based education. Outcomes-based education (OBE), also known as standards-based or performance-based education, is well established (Ramsay, Cutrer & Raffel, 2010). OBE has been referred to as standards-based education, since it essentially creates specific, concrete, measurable standards in an integrated curriculum framework. These standards then apply across the curriculum of a degree program. Traditional curricula may have been more subject-based in the past; however, the transition to more competencies-based approaches is beginning to take place within the university sector as a whole (Edgren, 2006). As a result of this close relationship between practitioners and educators, the underlying premise of outcomes-based accreditation in higher education is that it is a powerful means of ensuring degree integrity and quality (Harden, Crosby & Davis, 1999). In other words, this relationship fosters academia's ability to know what they should be teaching students. For example, while developing a core competency model for a graduate degree program in public health (Calhoun, Ramiah, Weist & Shortell, 2008), found that educators across diverse disciplines agree that competency- or outcomes-based education can improve individual performance, enhance communication and coordination across courses, and provide an impetus for curriculum development. And given the dynamic, complex, and interdisciplinary nature of the safety and health field, academic safety and health would be well served by each of these characteristics of outcomes-based education.

What is program-level accreditation? How is it different from institutional accreditation? Historically, accreditation has been and continues to be considered a critical quality assurance component of the U.S. educational system. Accreditation occurs at either the program-level (aka ***specialized*** accreditation) or the ***institutional*** level. Institutions of higher education can in turn be accredited by organizations or agencies that are ***recognized*** by either the U.S. Department of Education (USDoE), or the Council for Higher Education Accreditation (CHEA),

which incorporates regional accrediting bodies such as the North Central Association of Colleges and Schools, of the Southern Association of Colleges and Schools, etc.

Similar to the institutional accrediting organizations, academic programs within the institution can also be accredited by an accrediting organization. For example, one such program-level accrediting agency is ABET, Inc. ABET, Inc. is an organization dedicated to accreditation of academic programs within regionally accredited institutions of higher education.[1] Enhancing the reliability and credibility of the program accreditation process, these organizations can themselves seek ***recognition*** to become an accrediting organization through either the USDoE or CHEA. ABET, Inc. for example is "recognized" to perform specialized accreditation by CHEA. Recognition is a term of art that refers to an organization that has satisfied a number of complex quality control, administrative, and financial viability tests by an outside authority, either the US Department of Education or the Council for Higher Education Accreditation. Once "recognized" the accrediting organization can legitimately pursue and conduct specialized accreditation with academic programs. In other words, **recognition** serves the public interest since it indicates that the organization performing accreditation is itself qualified and legitimate.[2] In addition, there are also accredited professional credentials, such as the certified safety professional (CSP) among many others, a more thorough discussion of which is beyond the scope of this paper. The discussion that follows refers entirely to specialized accreditation of college/university degree programs in homeland security sciences.

Program-level accreditation is both a structure and process that attempts to demonstrate a measure of public accountability that students who graduate from a program have mastered a baseline set of outcomes (e.g., knowledge, behaviors, and skills), in order to function as required in specific professional venues. According to CHEA, "Accreditation is a process of external quality review used by higher education to scrutinize colleges, universities, and educational programs for quality assurance and quality improvement." (CHEA, 2002). According to the USDoE:

> The goal of accreditation is to ensure that education provided by institutions of higher education meets acceptable levels of quality. Accrediting agencies, which are private educational associations of regional or national scope, develop evaluation criteria and conduct peer evaluations to assess whether or not those criteria are met (The US Department of Education, 2010).

Going further, accreditation at both the institutional-level and program-level are considered central components in the fight against diploma mills (CHEA, 2008).

To execute program level accreditation, a set of vetted student (aka program level) learning outcomes (i.e., knowledge, skills and attitudes) that define a discipline are required. Typically, for many disciplines, program level outcomes derive from the literature and the practice environment of the discipline. In practice,

professional associations that represent the community of scholars, regulators and practitioners in a discipline work with accrediting organizations to identify, vet and maintain a set of program level outcomes that define their discipline. Hence, the accrediting process creates a mutually reinforcing network of practitioners, regulators, academic institutions and scholars to work together in the definition of a discipline.

Interestingly, both institutional and program-level accreditation is outcomes-based and centered on continuous quality improvement. The main difference between institutional and program-level accreditation is the set of outcomes used. With institutional accreditation, the accrediting organization identifies the structures, fiscal conditions and organizational practices that an institution should have in place in order to accomplish responsible and quality education, regardless of discipline. At the program level, it is the profession itself that develops and vets the accreditation outcomes that are reflective of that profession's best practices. Thus, it is critical to note that institutional accreditation not only has limited interest in program-level accreditation or profession-specific outcomes, it is not in a position to offer meaningful content contributions to program level outcomes.

Characteristics of accredited programs. Specific examples of healthy, effective, and successful program-level accreditation abound. It is an objective reality that well-respected, and well-established professions such as medicine, law, engineering, nursing, dentistry, nutrition, etc. not only embrace institutional and program accreditation, they are highly motivated to protect and maintain it. While there are social, regulatory and economic pressures that may contribute to the social demand for program accreditation within a discipline; there can also be pressure within the discipline to move toward program accreditation as a mechanism to further define itself or to protect its scope of professional operations. For example, just as there are legal requirements for physicians or lawyers to be licensed or dieticians to be registered or certified in order to practice, these same professions actively set, maintain, and disseminate their own student learning outcomes ostensibly to provide assurances that best practices in the field are taught to students before graduating. The obverse is true as well. That unless a student has acquired the stated set of learning outcomes from an accredited program, that student cannot call him/herself a practitioner of the discipline.

Accreditation is also linked to the creation of professional boundaries and barriers to entry. Programs that cannot demonstrate that their core curriculum offers the prescribed outcomes do not become accredited, and consequently, such graduates of such programs cannot become licensed to practice.

Professional disciplines that are accredited tend to have telling characteristics which collectively support the nature and goal of program-level accreditation. For example, they have well-established and active research and development activities, peer reviewed journals that seek and publish contributions to the discipline's body of knowledge, and conferences designed to share information

and provide opportunities for scholars, regulators and practitioners to network, opportunities for students to hone their professional development. Indeed the notion of *continuous improvement* inherent to accreditation is meant to have the outcomes-based accreditation standards reflect the best practices of a field on an ongoing basis whether those arise from practitioners or scholars or regulators. Consequently, in their truest form, program-level accreditation standards are not meant to be inviolable or permanent but should always be subject to change as the practice or regulatory environment changes, or the needs of a program's constituents change or as the body of knowledge dictates.

Program accreditation is designed to be progressive, not restrictive. Quality assurance from program-level accreditation arises because the accreditation process requires a minimum set of outcomes to be common to all graduates of a program, and all programs of a discipline. Implied in this is that the outcomes are indeed the thoughtful products of a healthy relationship between academia and the public, and private sectors including practitioners, policy makers, and employers. This does not imply that ***all*** the learning outcomes accomplished within a core curriculum are directed by accreditation. On the contrary, while each program needs to integrate and accomplish the published set of accreditation outcomes, accreditation often leaves room for additional, program-specific outcomes. These "additional" outcomes often represent things unique to a program's faculty strengths or unique to the preferences or requirements of a program's constituents. This structure allows even accredited programs to be individually capable of creating graduates in their own image, going well beyond the minimum set of standards typically required by accreditation. Specifically, take for example the concept of a master course outline. While a program may place outcomes required by accreditation into a given master course outline, outcomes-based accreditation would not prescribe anything else about the course. Indeed, this is the beauty of outcomes-based accreditation. Faculty (and by extension, the accredited program) are able to enjoy a good deal of flexibility regarding what else is taught in the class, or even what other outcomes are taught across the program.

In this sense, program-level accreditation is similar to the principles behind the Occupational Safety and Health Administration (OSHA). To protect worker health and safety, OSHA prescribes a set of safety and health standards at the worksite. Organizations compliant with OSHA regulations are required to provide their employees with education and training as well as a working environment conducive to the promotion of health and safety. How an organization accomplishes compliance to such federal mandates is largely left up to them. Furthermore, like accreditation, OSHA's standards are considered performance-based minima and organizations are subsequently encouraged to provide systems and structures that exceed those required by OSHA (OSHA, 2013). Consequently, many organizations seeking to maximize financial rewards for a healthy and safe workforce can and often do, go beyond OSHA's standards. And while OSHA regulations state what an occupational safety and health program must consist of, it only *requires* that OSHA's health and safety standards are met — leaving

substantial leeway to the organization to develop more detailed worker health and injury prevention programs. Like OSHA's role in enforcement and safety program development, it is the job of the accrediting organization to publish its standards, assist the program in integrating them into the core curriculum, and to assess the degree to which the program meets (or exceeds) the accreditation criteria in a way that is sustainable and responsive to its constituents.

Ten Reasons Why Specialized Accreditation in HS Education Makes Sense. Accreditation provides a structure and process that enhances the likelihood of achieving specific outcomes. When those outcomes are collectively defined by the community of scholars and practitioners and regulators, accreditation becomes the driving force behind professional identity, accountability and quality assurance. The following list attempts to summarize the literature and arguments made above in defense of program-level accreditation in academic homeland security.

1. Unless required by licensure or the government, program-level accreditation acts like a voluntary system of accountability that ensures a baseline level of quality, reliability, and validity among academic programs in the marketplace. Quality occurs because the accreditation system requires that programs show what their student learning outcomes are, how they are achieved and what they do to modify and enhance the program when students are not achieving the specified set of outcomes. Reliability occurs when accreditation outcomes are integrated across all programs. Validity occurs when outcomes are reliable and when the discipline works with the government, policy makers, employers, and academics to identify and vet outcomes characteristic to that discipline. This is especially true in disciplines such as homeland security that are complex and rapidly changing (dynamic) and where best practices may change often.

2. Program-level accreditation greatly enhances degree integrity (Volkwein, Lattaca, Harper & Domingo, 2007), and reduces diploma mills (Spellings, 2006). Licensure, certifications and accreditation function together to create barriers to (unwanted) entry in a given discipline. While the term "homeland security" remains non-uniformly defined (Reese, 2013), what is becoming better defined are the generally agreed upon content areas of an HS curriculum (Pelfrey & Kelly, 2013). This concern not only includes an element of "truth in advertising" but it also includes the notion that if any program can be an HS program, and any graduate call him or herself a HS professional, the credibility of the field must be diminished and the practice at risk of being perceived as questionable. Accreditation enables that at a minimum, students graduating from an accreditation program have accomplished a given set of outcomes that represent, to some degree, a common understanding of the knowledge, skills and attitudes that characterize a discipline.

3. The advantages of program-level accreditation outweigh the disadvantages. Program-level accreditation allows educational and programmatic flexibility while providing inherent accountability. Quality arises from integrating accreditation outcomes into the curriculum as an on-going process of continuous improvement. Flexibility arises because programs that integrate accreditation outcomes have ample room to create unique niches in the market by institutionalizing characteristics, experiences, skills and other outcomes specific to them and the needs of their constituents. Other advantages include the need to regularly assess the effectiveness of one's curriculum and a willingness to engage in continuous quality improvement, to develop and engage an industry advisory panel with whom the program works on curriculum development, internship and job placement, regular engagement with students in an effort to determine the strengths and weaknesses of the curriculum, the need to have an established and defensible advising system and the need to track the professional progress of graduates.

   There are some potential disadvantages as well. Probably the biggest anecdotal disadvantage may be the perceived extra costs associated with the site visit component of the accreditation process. Most recognized accreditation organizations will charge an academic program for the privilege of undergoing an accreditation site visit and an annual maintenance fee to remain accredited. Also, there are those who may disagree with the concept of accreditation in the sense that it may stifle creativity or individuality in a program. Worse, some may think that accreditation could unduly cause an inappropriate level of uniformity across programs. However, this may not be the case. It is important to note that in many programmatic accreditation systems, the main function is to specify a *minimum set* of student learning outcomes in the curriculum. While the size of undergraduate curricula tends to vary, many require between 36–45 credits in their core. To prevent an illegitimate influence or restriction of curricular flexibility, there should be more student outcomes dictated by the specific characteristics of a program than dictated by accreditation. Generally speaking, observations across a variety of accreditation schemes tend to support this. For example, assuming a typical 36 credit major is composed of 12 three credit courses and that each course syllabus contains 7–9 student learning outcomes, there are conservatively speaking 84–108 student outcomes represented in a given core curriculum. While it varies across disciplines and across recognized accrediting organizations, several recognized accreditation systems require around 20–40 student learning outcomes. Hence, in proportion to the total number of outcomes students in a major need to achieve to graduate, the number required by accreditation tends to account for less than half.

4. Program-level accreditation helps to ensure the education market place works by providing more complete information exchanges between

consumers (employers, grant giving agencies, etc.), suppliers of education (faculty, programs, universities, etc.) and purchasers of education (students). Indeed, one might argue that a minimum set of standards commonly accepted by the community of practitioners and academics and achieved by students could actually serve to define the discipline since all those graduating from a given program will have demonstrated some level of competence in a standard set of skills, knowledge and attitudes as judged by the community of scholars, regulators and practitioners in a discipline.

5. Institutional accreditation alone is not sufficient to guarantee program-level quality. What accrediting organizations require from an institution (college or university) seeking accreditation is unrelated to the specific program outcomes of interest to a discipline. As described above, institutional accreditation is more concerned with characteristics of the overall educational environment and not the specific outcomes that describe a discipline. Indeed, it is not uncommon to have as a requirement of program-level accreditation that the program resides administratively in an institution that itself is accredited. Not only does such a requirement tend to ensure that the program has access to the resources and structures needed to sustain a professional and continuously improving program, but it serves to indicate that institutional accreditation as a process offers no contribution to the set of student learning outcomes derived by a professional discipline and required by program-level accreditation.

6. Program-level accreditation facilitates continuous quality improvement by both the institution and the program by integration of research into practice, and best practices into accreditation standards and outcomes. In turn, this process amplifies communication and integration between academia, the government and practitioners, which is critical in complex and dynamic fields.

7. There exists no evidence that accreditation harms, restricts or endangers any of the professions that currently embrace it. Programs typically have ample room in the curriculum to integrate outcomes of interest to the faculty or constituents that are not accreditation outcomes. Further, the professions that have embraced program-level or specialized accreditation (e.g., medicine, law, engineering, etc.), have not reported harms to the quality of their education or limitations on their practice that are attributable to accreditation.

8. The outcomes taught in a discipline's academic programs also function to define the discipline. By extension, accreditation is a hallmark of an established profession.

9. Program-level accreditation supports transferability and articulation of academic credit to other institutions. This is an increasingly important

characteristic given the growth in homeland security programs (estimated by the UAPI program to be approaching 400 programs at the moment) at the associate, undergraduate and graduate levels over the past five years.

10. Accreditation acknowledges a level of competence in that it requires an organization have numerous management controls in place related to accountability and efficient, effective use of available resources in providing services. It plays a significant role in fostering public confidence in the educational enterprise, in maintaining standards, in enhancing institutional effectiveness, and in improving higher education, by providing the basis on which colleges and universities can assure that their institutions have complied with a common set of requirements and standards.

Questions to Ponder as the HS Discipline Moves Ahead. The academic and programmatic underpinnings of the well-established professions (e.g., medicine, law, engineering, etc.) are clearly much older and therefore better established than in HS. Given that, it is legitimate to wonder whether the HS enterprise is too diverse, too unwieldy and too ill-defined to define itself professionally. Further, it is distinctly possible that although homeland security is clearly a function of government and has a better defined curriculum than six or seven years ago, an underlying theory of homeland security has yet to evolve. Consequently, it may not yet be possible to establish a common set of student learning outcomes, especially at the undergraduate level where one's education tends to be more that of a generalist than of a specialist. Interestingly, these were precisely the same sorts of challenges faced by medicine prior to its adoption of a standard set of science-based outcomes. And while some might argue that specialized accreditation is most appropriate in disciplines that are mature and established, or that have a robust body of knowledge, clearly identified practice boundaries, etc., the question for HS education becomes one of the proverbial chicken and egg. At some point medicine determined that enough definition and commonality existed for it to adopt a minimum set of outcomes for education (even education for a discipline that includes multiple sub-disciplines). When medicine decided it was mature enough to standardize its curriculum base, it immediately pursued accreditation to ensure its sovereignty and legitimacy and to try and rid itself of "quackery". This conclusion took place in 1910 when Andrew Carnegie commissioned the Flexner Report on Medical Education (Flexner, 1910) in an attempt to minimize poor practice patterns and deception and to force a scientific basis to the education and practice of medicine. All professions have life cycles. Over time, those disciplines that lean on science and best practices become mature, established and progress in concert with the accreditation process, which facilitates the integration of research to practice, and best practices into education.

CONCLUSION

There is an abundance of literature that discusses the fundamental characteristics of accepted professions. For example, Ferguson and Ramsay argue that the occupational safety and health discipline is a sovereign profession because it

possesses the identified characteristics of a profession including peer reviewed research, some barriers to entry, a professional association, journals and conferences, and accreditation (Ferguson & Ramsay, 2010). In light of the Ferguson and Ramsay review, one might observe that the emergent discipline of homeland security has developed many of these characteristics in its brief history. Understandably, there is still debate in the academic literature as to whether HS is a discipline (Bellavita, 2012), in the same manner as medicine, law or theology. Regardless as to what side of this argument one may support, there is convincing evidence that HS continues to develop, mature and experience issues common to emerging professions. Two such issues are related to government and private sector recognition and education and training (Dower, O'Neil, & Hough, 2001). For example, as Reese points out in a January 2013 Congressional Services Report, there is disharmony in the definition of HS at the Federal level (Reese, 2013). As Bellavita (2008), and Kiltz and Ramsay (2013), have pointed out, there remains disagreement in what is and is not HS from an educational perspective. In order for the HS discipline to continue to evolve as a profession, there are several compelling questions that will require research and discussion including:

1. What are the intellectual boundaries of the homeland security construct?
2. Should accreditation wait for a commonly accepted theory of homeland security to evolve before it can legitimately generate a common set of student learning outcomes?
3. Should HS practitioners be licensed?
4. What happens to the accreditation discussion if the Federal government requires HS-oriented jobs to be filled by only those accredited programs?
5. Given the breadth, complexity and scope of the homeland security enterprise, does it makes sense to develop professional certification for HS practitioners?
6. What are the consequences if HS academics and practitioners fail to define the boundaries of their profession?

Regardless of the answer to these research questions, the author suggests that education which combines training and which is linked to best practices and based in research should remain significant and essential components of professional HS education. Further, if HS evolves the way medicine, nursing, law, and engineering have, a formal and widely understood and adopted accreditation mechanism will likely begin to provide significant benefits to quality control, legitimacy and professionalism. As such, perhaps it is time for academic HS to take the next step in its development and embrace and promote program-level accreditation. In the same way it is critical to American public health and safety to have well educated physicians, engineers, nurses, lawyers, etc. whose practices are complex and dynamic, and who each have multiple sub-specialties, and yet whose education is adherent to rigorous outcomes jointly set by practitioners, regulators and academics, it seems logical and appropriate for academic homeland security to develop similarly.

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[1] ABET, Inc. used to stand for the Accreditation Board for Engineering and Technology, but now they've changed their name to simply, ABET, Inc.

[2] Another more recent organization currently finalizing its recognition application with the US Department of Education is the Foundation for Accreditation in Higher Education (FFHEA), which is a relatively new organization. Once recognized, FFHEA is poised to be able to accommodate program level accreditation in emergency management programs, as well as homeland security and a wide variety of other disciplines as well.