Synergy between Training and Education: Advancing the Dialogue and the Efforts

FEMA Higher Education Program Training and Education Synergy Focus Group April 7-8, 2014

* This report was written by Carol Cwiak on behalf of the above-noted group. It provides a brief history of how the engagement came about and a summary of the group's work and next steps. This engagement was the first in what the group hopes will be ongoing efforts designed to further the emergency management community's collective goals by increasing overall awareness in the community about the purviews of the academic discipline and the practitioner community; identifying the opportunities to assist in, elevate, and benefit from each other's efforts; and, communicating the importance of such efforts in strengthening emergency management's identity, voice, and professionalization efforts.

The group expresses its gratitude to FEMA's Emergency Management Institute for supporting this effort, particularly Tony Russell, Lillian Virgil, Houston Polson, and Barbara Johnson.

History

The initiation of the synergy between training and education focus group began in earnest in October of 2012 at the International Association of Emergency Managers (IAEM) Training and Education Committee Meeting. It became apparent in that meeting that there were many noteworthy efforts going on in both the practitioner and academic communities regarding training and education that were sometimes duplicative; worthy of cross-pollination, sharing, or promotion in the larger emergency management community; and, that represented critical and necessary steps in the professionalization process. Emergency Management Institute Superintendent Tony Russell was in attendance at the meeting and agreed at the request of committee members to initiate via the FEMA Higher Education Program a focus group effort designed to examine the synergy between training and education efforts. Due to a number of factors, the focus group did not come to fruition until April of 2014.

Focus Group Composition

The original design of the focus group was to bring in seven to eight practitioners and a like number of academics. Unfortunately, due to tightening budgets the number of participants was reduced to five practitioners and five academics. Additionally, three FEMA Emergency Management Institute representatives were present. The group was led by Lyn Gross-Rosgaard, IAEM Training and Education Committee Chair, and Carol Cwiak, Executive Director of the Emergency Management Higher Education Consortium. Gross-Rosgaard and Cwiak created the participant recommendation list for their respective areas. The group included the diversity in thought, education, experience, and position deemed important to the development of a robust discussion and meaningful outcomes. The group composition, to include affiliation, position, and

credentials, is provided in Table 1 below. Of note, some of the group members were present as organizational representatives, while others were present as representatives of their agencies or institutions.

| Group Participant | Affiliation | Credentials/Position |
|--------------------|---------------------------------|---------------------------|
| Karen Adkins | Office of Emergency Management, | CEM |
| | McKinney, TX | Director |
| Stephen Carter | University of Maryland – | M.S. |
| | University College/Frederick | Associate Professor |
| | Community College | and Academic Director |
| Cathy Clark | IAEM Training & Education | M.A. |
| - | Committee | T & E Committee Member |
| Carol Cwiak | Emergency Management Higher | J.D., Ph.D. |
| | Education Consortium | Executive Director |
| Daniel Good | Emergency Services Coordinating | M.A., CEM |
| | Agency, Washington | Emergency Coordinator |
| Lyn Gross-Rosgaard | IAEM Training & Education | CEM |
| | Committee | T & E Chair |
| Jessica Jensen | North Dakota State University | Ph.D. |
| | | Associate Professor and |
| | | Graduate Program Director |
| Barbara Johnson | FEMA/EMI | Program Assistant |
| | | Higher Education Program |
| Jane Kushma | Jacksonville State University | Ph.D. |
| | | Associate Professor and |
| | | Doctoral Program Director |
| David McEntire | University of North Texas | Ph.D. |
| | | Professor |
| Paula Phillips | IAEM Training & Education | Vice Chair |
| _ | Committee | T & E Committee |
| Houston Polson | FEMA/EMI | M.B.A., J.D. |
| | | Director |
| | | Higher Education Program |
| Lillian Virgil | FEMA/EMI | Chief |
| _ | | Mitigation Branch |

Table 1

Focus Group Process

The focus group began with presentations in regard to the history, current status, future goals, and value of synergy in regard to the education and training communities. These presentations were followed by discussion and agreement on areas of consensus. Beyond the areas of

consensus, the group discussed the overall importance of synergy and collective goals that could drive next steps. The group created a list of next steps which group members agreed to work on either individually, in partnership with another group member, or as a part of a collaborative effort. The focus group agreed that future meetings would be of value and should include expanded participation. The nature and timing of such future meetings was left for later discussion.

Areas of Consensus

The group arrived at an easy consensus regarding the academic disciplinary purview of emergency management as summarized from the disciplinary purview work completed by the emergency management higher education community. It was agreed that the academic discipline of emergency management "is the study of how humans and their institutions interact and cope with hazards, vulnerabilities, and resulting events" and that the "three primary responsibilities of the discipline of emergency management include educating students, conducting and disseminating research, and other scholarly activity" (see Appendix A for the summary document and the two reports from which the summary was drawn).

Emergency management education was described in the summary document as follows:

"Emergency management educates future emergency management professionals in a manner that will benefit them wherever they enter the broad profession (i.e., nonprofit, business, local government, state government, federal government, international humanitarian assistance).

Emergency management also educates those throughout society who perform tasks and activities related to emergency management (e.g., those who will become our community's planners, assessors, fire fighters, police officers, public works employees, engineers, etc.).

Emergency management educates students based on the vast and rich body of scholarship associated with its disciplinary purview including, at minimum, hazards, vulnerability, risk, events, preparedness, response, mitigation, and recovery and a host of sub-topics related to each of these areas. While educating students about emergency management phenomena, emergency management also gives students the opportunity to build skills that are considered key for thinkers, innovators, communicators, and collaborators both within emergency management and more broadly outside of emergency management. These skills include verbal communications, written communications, interpersonal communication, group communication, network building and stakeholder engagement, analytical thinking, application of research in practice, problem solving, decision making, and leadership."

The group likewise agreed on the importance and value of training in the development of emergency management professionals both pre- and post-graduation for emergency management students, for those bearing primary emergency management responsibilities absent an emergency

management degree, and for those bearing secondary or corollary emergency management responsibilities such as administrators or partners. It was agreed that training has focused, specific goals that seek to build basic competencies in a particular area, and is not supplanted by education, but is shaped by, and evolves in accordance with, the needs of an evolving practitioner community that increasingly has sought out some level of emergency management education.

The group also acknowledged that in addressing the synergy between education and training, it was also necessarily discussing the communities most uniquely tied to them – the academic and practitioner communities – and the purviews of those communities – the discipline and field. It was agreed that these communities (and purviews) do indeed have shared interests and needs that are best met in collaborative partnership. It was likewise agreed that these communities often share similar challenges (see McEntire, 2012 in Appendix B). A triangle was utilized to represent the whole of the emergency management community and the group's view of the opportunity for synergy (see Figure A below).

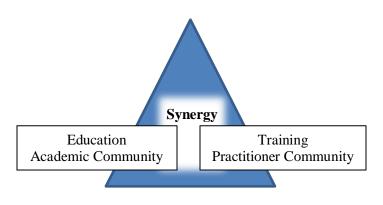


Figure A

Importance of Synergy

The group agreed that the agendas of education and training, while different, are connected. Cross-pollination between the two communities (academic and practitioner) was also emphasized as being critical to emergency management's success as a professionalizing field. In many ways, the discussion of synergy between education and training, was one of synergy between the earnest efforts of these two linked, but too often separated, communities. It was agreed that there are many areas where education and training, and academics and practitioners, could meet and work together to advance the directives of the collective emergency management community. In particular, the value of partnering across sectors, with all governmental levels, and across different types of organizations working within the field of emergency management was noted. Additionally, the group agreed that these partnerships could occur at the micro or macro level; could be initiated by either the academic or practitioner community; could be formal or informal; and, could be short or long term engagements. The group viewed such efforts as reinforcing of the "whole community" approach which has already been deemed essential to successfully advancing the field of emergency management's goals and directives.

Next Steps

In light of the discussions and consensus in the group, a series of next steps were identified. Each group member agreed to work and collaborate on a number of these next step projects. Additionally, the IAEM Training and Education Committee and the FEMA Higher Education Program agreed to work together to distribute information produced by the group. Each next step project is briefly summarized below.

• **Synergy Report** (June 2014)

A summary of the group's work and proposed next steps to be posted both on the FEMA Higher Education webpage and the IAEM Training and Education Committee webpage.

• **PowerPoint Presentation** (June 2014)

A presentation designed to share the group's work and discuss next step efforts and progress with a variety of academic and practitioner groups.

• **IAEM Articles (2)** (Summer 2014)

The submission of two articles regarding the synergy between training and education in the remaining months of 2014 to the *IAEM Bulletin*, to include awareness of the group's work generally and specifically (see Appendix C for the first submission).

• **Identify Items/Resources** (June 2014/ongoing)

The identification of items and resources that already exist or are being developed that help inform, facilitate, or further synergy efforts that can be shared for the benefit of the academic and practitioner communities.

• Cross-post Website Links (June 2014/ongoing)

The undertaking of deliberate efforts to liberally cross-post synergy-focused items on both the IAEM Training and Education Committee webpage and the FEMA Higher Education webpage.

• **Do 1 Thing** (June 2014)

The creation of *Do 1 Thing* documents that provide simple ideas of ways in which education and training partners can engage (see Appendix D).

• **Description of Profession** (Summer 2014)

The creation of a summary document for the profession that provides a succinct purview framing (akin to the disciplinary purview document supported by the group).

• **Body of Knowledge** (ongoing)

A commitment to advance discussions that have been ongoing between the academic community and FEMA's Emergency Management Institute administrators to identify and gather the discipline of emergency management's body of knowledge in a singular location that can be readily accessed (at least for search purposes) for the entire emergency management community to access.

• Theory to Practice Article Synopses (ongoing)

The creation of an ongoing micro-purchase line under the FEMA Higher Education Program that supports extrapolation of the key findings in research to their implications for practice.

• Synergy Best Practices (ongoing)

An effort to capture and share short summaries of synergy best practices from the emergency management community for the purposes of sparking ideas and providing helpful tips to those interested in pursuing synergistic efforts.

• **EM Hi Ed Brochure** (Summer 2014)

The creation of a brochure that captures the disciplinary purview summary agreed upon by the group that can be used to help clarify the role of the academic community generally, and education, specifically.

• **FEMA Webinar** (Fall 2014)

A FEMA sponsored webinar that covers the work of the group, the next steps undertaken, and future efforts to promote synergy between training and education.

• Presentations to Hi Ed/Practitioner Communities (ongoing)

A commitment to ongoing efforts to present about the group's efforts, ideas for synergy, best practices, etc. as opportunities become available.

Conclusion

The group was satisfied with its productivity and enthusiastic about the steps forward that were identified and committed to by group members. The group did note that while its composition was in many ways diverse, it was - as a whole - very forward leaning in regard to consensus. It was clear that all the group members came to the table prepared to advance efforts in this arena.

It is hoped by the group that the enthusiasm for advancing these efforts will be as evident in the academic and practitioner communities. It is recognized that advancing synergy between these communities and their efforts is necessary to emergency management's professionalization efforts. Indeed, the more concisely emergency management's identity is stated and supported, the stronger the community's collective voice becomes.

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Appendix A

Disciplinary Purview of Emergency Management

Emergency management is the study of how humans and their institutions interact and cope with hazards, vulnerabilities, and resulting events. The three primary responsibilities of the discipline of emergency management include educating students, conducting and disseminating research, and other scholarly activity.

Education

Emergency management educates future emergency management professionals in a manner that will benefit them wherever they enter the broad profession (i.e., nonprofit, business, local government, state government, federal government, international humanitarian assistance).

Emergency management also educates those throughout society who perform tasks and activities related to emergency management (e.g., those who will become our community's planners, assessors, fire fighters, police officers, public works employees, engineers, etc.).

Emergency management educates students based on the vast and rich body of scholarship associated with its disciplinary purview including, at minimum, hazards, vulnerability, risk, events, preparedness, response, mitigation, and recovery and a host of sub-topics related to each of these areas. While educating students about emergency management phenomena, emergency management also gives students the opportunity to build skills that are considered key for thinkers, innovators, communicators, and collaborators both within emergency management and more broadly outside of emergency management. These skills include verbal communications, written communications, interpersonal communication, group communication, network building and stakeholder engagement, analytical thinking, application of research in practice, problem solving, decision making, and leadership.

Research

The discipline of emergency management collects, analyzes, integrates, and synthesizes literature related to hazards, vulnerabilities, and resulting events; generates new knowledge through original research (i.e., basic and applied) and critical assessment of existing hazards and disaster literature; and, promotes the dissemination, application, and utilization of the results of original research.

Scholarly Activity

Scholars in the discipline of emergency management seek to foster the utilization of research findings and to the extent possible foster practical application of research findings; make the results of their research available and accessible in form, format, and forum to multiple audiences (e.g., policy makers and practitioners); collaborate with those working in the profession so that theory shapes practice and practice shapes theory; influence policy; advocate for a culture of shared responsibility related to hazard events; and, foster the legitimacy and development of the academic discipline and profession of emergency management.

Potential Benefits Associated with Fulfilling Disciplinary Responsibilities

- Safer, less vulnerable world with increased capacity to cope with hazards and disasters
- Reduction in the frequency and impacts of events
- Increased engagement in hazards and disaster research area across all academic disciplines
- Improved quality of hazards and disaster research being done by other disciplines
- Introduction of a discipline that is perceived as both legitimate and credible across academic disciplines and academic institutions of higher education
- Emergency management policy based on empirical research findings
- Improved emergency management practice and programs through bridging the theory to practice divide
- Shape the next generation of professional emergency managers

- Clearer communication of our identity and needs within our departments, colleges, and individual institutions
- Clearer communication of the education we have to offer students at various degree levels and how such an education relates to various possible career paths
- Appeal to a broader base of students and in so doing increase program visibility and sustainability within higher education and our individual institutions
- Increase quality of EMHIED curriculums by grounding our coursework in the body of knowledge available

Other Points of Consensus

There are four major areas where an emergency management career can be pursued including government, humanitarian assistance, domestic nonprofits, and businesses.

Students must pursue professional development opportunities (e.g., training, certification) and opportunities to gain direct, hands on management experience to be competitive in attaining emergency management jobs.

Higher education programs are not alone responsible for the professional development of their emergency management students.

The professional development and experience students would ideally pursue to complement their emergency management education varies depending on whether the student desires a career in a domestic nonprofit, business, government, or international humanitarian assistance.

Emergency management programs would be wise to sensitize their students who desire an emergency management career to the importance of professional development and the opportunities for different career areas. And, programs ought to inform students of the responsibility they bear for their professional development.

Emergency management programs should not conceive of themselves solely as professional prepatory programs

Higher education programs owe students the opportunity to learn about the significant, substantive, and topically varied body of scholarship and research that would benefit them in all emergency management career paths.

It would not be possible for degree programs to address each of the professional development needs related to the range of emergency management careers within the auspices of a single higher education program at any level.

Professional development may be part of higher education program curricula to varying degrees and manifest in different ways, related to different career areas.

There is an opportunity and need for increased partnerships between higher education programs in emergency management and organizations offering emergency management training.

Report of the Disciplinary Purview of Emergency Management Focus Group Held September 10-11, 2012 at EMI

Participants:

Jessica Jensen, North Dakota State University (facilitator)
Shirley Feldmann-Jensen, California State University Long Beach
Jane Kushma, Jacksonville University
David McEntire, University of North Texas
Claire Rubin, Claire B. Rubin & Associates, LLC

Preface

The Federal Emergency Management Agency's (FEMA) Higher Education Program hosted a focus group from September 11-12, 2012 at the Emergency Management Institute (EMI) to help explore characteristics of the emergency management discipline such as its disciplinary purview and a set of basic research questions. The focus group had two days of robust discussion and debate that resulted in group consensus on the disciplinary purview of emergency management, disciplinary responsibilities related to education and research, and other topics. Despite the diverse experience of the participants, the group achieved remarkable consensus regarding all of the topics discussed.

Report

The following short report the results of the group's meeting as well as progress made by the group toward the stated objectives. The report also shares the plans to present their ideas and rationale to the wider emergency management higher education community through the development and wide distribution of a white paper and then a presentation at the 2013 FEMA Higher Education Conference.

OBJECTIVE: Discuss and debate what is currently perceived to be the disciplinary purview of emergency management.

The group discussed various definitions of emergency management (EM) that have been offered and the degree to which these various definitions are suited to EMHIED, particularly EM as an emerging academic discipline in its own right. A consensus emerged that current definitions of emergency management were not appropriate for the emergency management higher education community (EMHIED) because of one or more of the following reasons: 1) the definition was referring to how EM should be practiced; 2) the definition was referring to the EM profession or the job of an emergency manager; 3) the definition was too narrow; 4) the definition did not reflect the role EMHIED does/could/should play within academia; 5) the definition did not lead to consideration of the full body of knowledge available to ground EMHIED; 6) the definition did not relate to, or set the stage for, understanding EMHIED's approach to research. After significant discussion about what the definition of the emergency management academic discipline should entail, the group achieved consensus around the following definition:

The Discipline of Emergency Management

Emergency management is the study of how humans and their institutions interact and cope with hazards, vulnerabilities, and resulting events (i.e., emergencies, disasters, catastrophes, and complex humanitarian crises), particularly through activities related to preparedness, response, recovery, and mitigation.

The group then moved onto what the educational and research responsibilities of the emergency management academic discipline should include. The group recognized that EMHIED serves the emerging profession of EM. Armed with an EM education, some degree program graduates will go on to seek employment as emergency management professionals. Emergency management professionals are employed at each level of government (e.g., city, county, state, tribal, and federal) and within various governmental agencies at each level (e.g., Departments of Emergency Management, Departments of Public Health, Departments of Transportation, Departments of Public Works), domestic and international nongovernmental organizations, and businesses. The group acknowledged that degree program graduates who choose to pursue an emergency management career will be most successful if they choose to complement their higher education experience with significant training and one or more internships.

The group agrees that EMHIED ought not just to be viewed as serving those who wish to be full-time EM professionals. In addition, EMHIED also can serve students who will enter a host of other professions (e.g., public administration, law, natural resources and environmental management, business administration, nonprofit administration, social work, public health practice, hospital administration, and engineering) that undertake a diverse array of EM related tasks and activities before, during, and after events occur. Any level of EM education is a suitable and strong complement to individuals seeking, or already practicing in, careers in any of the aforementioned areas. Thus, the group believed that the discipline of emergency management's educational responsibilities include the following:

Disciplinary Responsibilities: Education

- 1. Educate future emergency management professionals in a manner that will benefit them wherever they enter the broad profession (i.e., nonprofit, business, local government, state government, federal government, international humanitarian assistance); and,
- 2. Educate those throughout society who perform tasks and activities related to emergency management (e.g., those who will become our community's planners, assessors, fire fighters, police officers, public works employees, engineers, etc.).

The group acknowledged that the aspirations and career goals of students, the knowledge base and experience students bring to their degree program, and how material is presented and discussed will differ by level of education. The group also believed that each type of degree program in EM has a unique purpose and that degree programs of all types are needed. Specifically, it was thought that EMHIED needs to continue to strengthen programs that offer the following types of degrees:

- 1. Doctoral degree to develop a significant depth and breadth of knowledge of the emergency management literature and research methodology in order to pursue teaching, research, or policy work in emergency management;
- 2. Master's degree to gain a higher level of understanding to enhance, enrich, or otherwise expand their knowledge of emergency management and how to apply it. Master's degree students will serve in particular those who desire a supervisory or leadership role in emergency management;
- 3. A bachelor's degree that provides a broad-based education in the foundational knowledge required to pursue an emergency management career; and,
- 4. Associate's degree, minor, and graduate certificate as complements or supplements to a major in a variety of other academic disciplines and career goals.

Despite the important differences in degree type, the group felt that the areas in which EM students ought to be educated and the body of knowledge that should be drawn upon in should be the same.

The focus group thought that EMHIED should educate students on the basis of the vast and rich body of knowledge available. The group acknowledged that contributions to the body of knowledge have been made by scholars in a wide variety of disciplines (e.g., sociology, public administration, geography, anthropology, economics, political science, communications, engineering, psychology) and can be found in books, scholarly peer-reviewed journal articles, and research center publications; and, further, that the EM body of knowledge is increasingly also found reflected in emergency management textbooks. The body of knowledge available has evolved over decades and will continue to evolve and expand as a diverse array of academic disciplines continue to explore hazards, vulnerabilities, and resulting events through their research and as EM scholars (i.e., those academics who identify themselves with the emerging discipline emergency management and Ph.D. holders in emergency management) contribute to the body of knowledge through their own research.

Indeed, the group believed that EM, as a discipline in its own right, has important research responsibilities. A key conclusion reached by the group: The discipline of EM has a responsibility to collect, analyze, integrate, and synthesize the literature related to hazards, vulnerabilities, and resulting events. No academic discipline currently perceives this task as their responsibility or domain; no academic discipline bases its education of students on such an approach exclusively; and, the research of all other disciplines on the topics of hazards, vulnerabilities, and resulting events remains incomplete without a foundation on integration and synthesis. Thus, EM has a unique opportunity to contribute by basing both the education we offer and the research we conduct on the integration and synthesis of the hazards and disaster literature. While the group believed that the EM academic discipline, like any other, has a responsibility to conduct both basic and applied research, its foundation will rest upon the literature related to our topics that has been generated by scholars from a host of disciplines. With respect to research responsibilities, the group suggested that the EM discipline has the responsibility to...

Disciplinary Responsibilities: Research

- 1. Collect, analyze, integrate, synthesize literature related to hazards, vulnerabilities, and resulting events;
- 2. Generate new knowledge through original research (i.e., basic and applied) and critical assessment of existing hazards and disaster literature; and,
- 3. Promote the dissemination, application, and utilization of the results of original research.

The group also discussed the research focuses that EM ought to pursue. The research focuses of other disciplines were explored as a means of generating conversation and comparison. A range of ideas were presented on the first day as to potential research foci for EM. On the second day, the group returned to their original list, held additional discussion, and reduced the list significantly. The group believed that EM research ought to primarily explore the following:

Emergency Management's Primary Research Foci

- 1. Describe and explain variation in and patterns related to how humans and their institutions perceive hazards, vulnerabilities, and resulting events;
- 2. Describe and explain variation in and patterns related to the how humans and their institutions cope with hazards, vulnerabilities, and resulting events through tasks and activities related to preparedness, response, mitigation, and recovery;
- 3. Evaluation and measurement of the degree to which humans and their institutions are prepared, have responded, have mitigated, have recovered;
- 4. Evaluation and measurement of the degree to which the tasks and activities undertaken by humans and their institutions result are effective and/or efficient; and,
- 5. Evaluation and measurement of the degree to which the tasks and activities undertaken by humans and their institutions are *adaptive* (e.g., lead to sustainability, resilience, and/or resistance).

Regardless of the focus of EM research, the group felt that all EM research must be grounded in the integration and synthesis of topic-related literature as previously discussed. Moreover, the group felt that EM researchers must situate their research within context (e.g., historical, political, social, cultural, physical, and economic) at the beginning and end of their research and to the extent possible work toward the practical application of their research findings.

The focus group determined that EM has scholarly responsibilities that go beyond education and research. Specifically, the group believed that EM scholars are obligated to not only disseminate the findings of their research in scholarly, peer-reviewed journals, books, and conferences but also through forms, formats, and forums that are accessible to and used by EM practitioners and policy makers. The group discussed an initial list of both scholarly and practice-oriented outlets for EM research. The list was provided to the Research Standards Focus Group that was meeting later in September for their review and discussion. Beyond merely making findings available and accessible through multiple sources, the group felt that EM scholars should actively seek to collaborate with individuals working in the EM profession and policy makers to bridge the theory-practice divide. EM scholars must also go beyond these audiences to advocate within

their institutions and communities for a culture of shared responsibility to cope with events. And, finally, EM scholars have the responsibility to increase understanding of what the EM discipline is and the contributions the discipline make within our institutions and across other academic disciplines.

Disciplinary Responsibilities: Scholarly Activity

- 1. Seek to foster the utilization of research findings and to the extent possible foster practical application of research findings;
- 2. Make the results of our research available and accessible in form, format, and forum to multiple audiences (e.g., policy makers and practitioners);
- 3. Collaborate with those working in the profession so that theory shapes practice and practice shapes theory;
- 4. Seek to influence policy;
- 5. Advocate for a culture of shared responsibility; and,
- 6. Foster the legitimacy and development of the academic discipline and profession of emergency management.

The group pondered the many and significant hurdles that EMHIED will have to overcome to see the purview developed through its discussions (and outlined in this short report) adopted. From recognition of the disagreement across the EMHIED community regarding how EM education should be approached, to the lack of a professional association of EM educators, to programmatic resource issues (e.g., faculty, staff support, funding, lack of quality textbooks), and institutional barriers (e.g., the location of EMHIED programs in other disciplinary departments), there are many issues that the EMHIED community will have to address in the near future. Yet, the group felt that just because there are obstacles facing EMHIED does not mean that disciplinary development should not proceed. In fact, further disciplinary development (along the lines of and expanding beyond what has been presented in this paper), may be part of the solution to addressing the issues EMHIED faces.

In fact, as the focus group explored what might be achieved as a result of implementing the disciplinary purview it had developed, it became clear that adoption and implementation of the disciplinary purview throughout EMHIED had the potential to facilitate the following:

Potential Societal Impacts of the EM Discipline

- 1. Safer, less vulnerable world with increased capacity to cope with hazards and disasters; and,
- 2. Reduction in the frequency and impacts of events.

Potential Impacts of the EM Discipline in Academia

- 1. Increased engagement in hazards and disaster research area across all academic disciplines;
- 2. Improved the quality of the hazards and disaster research being done by other disciplines; and,
- 3. Introduction of a discipline that is perceived as both legitimate and credible across academic disciplines and academic institutions of higher education.

Potential Impacts of the EM Discipline in EM Practice

- 1. Emergency management policy based on empirical research findings;
- 2. Improved emergency management practice and programs through bridging the theory to practice divide and; and,
- 3. Shape a new generation of professional emergency managers.

Potential Impacts of Disciplinary Development to Current EMHIED Programs

- 1. Clearer communication of our identity and needs within our departments, colleges, and individual institutions;
- 2. Clearer communication of the education we have to offer students at various degree levels and how such an education relates to various possible career paths;
- 3. Appeal to a broader base of students. Some students will go on to seek employment as a professional emergency manager but most will seek careers outside of the emergency management profession. This broader base increases program visibility and sustainability within higher education generally, and our individual institutions specifically, (e.g., increased numbers of students in EM classes) without further increasing the pressure on programs to have their students employed as EM professionals upon graduation; and,
- 4. Increased quality of EMHIED curriculums by grounding our coursework in the body of knowledge available.

OBJECTIVES: Discuss and collaborate on a white paper detailing the focus group's suggestions for emergency management's disciplinary purview and core research questions and supporting rationale. The white paper (of between 10-25 page length) will be submitted to the Higher Education Program Manager for posting on the Higher Education Program website prior to the 2013 Higher Education Conference AND discuss and agree upon a schedule for completion of the white paper as well as individual focus group member roles related to the production of the white paper.

The group realized that this short report would not comprehensively reflect its discussions, its perspectives, and the rationales for its perspectives prior to the assembly of the focus group at EMI in September. Thus, the intent of the focus group from the beginning was to collaboratively produce a white paper related to its discussions and convey its discussions through a presentation at the 2013 FEMA Higher Education Conference.

Toward that end, group members developed an outline for the white paper, who would do the initial drafts of each section, and the approximate page lengths of each section. The working outline follows:

- A. Preface—1 page (Jessica)
 - 1. History of the project
 - 2. Goals
 - 3. Dates
 - 4. Who is involved
- B. Introduction—no more than 3 pages (Claire)

- 1. Evolution of higher education
- 2. Brief historical review
- 3. Explanation of why it is that way
- 4. Current issues in the discipline
- 5. What must be accomplished
- 6. Vision for what can be accomplished as a result of adopting and implementing this purview
- C. What Emergency Management Is—2 to 3 pages (Dave)
 - 1. Professional discussion group had
 - 2. What it is; what it is not
 - 3. A discussion of the distributed nature of emergency management (Emergency management is an emerging profession. More importantly, it is a distributed function. Emergency management higher education has to do research that serves and educates both.)
 - 4. A discussion of the implications of that for higher education
 - 5. An analysis of the implications versus where we are currently doing
- II. Defining the Purview of Emergency Management Academic Discipline—2 to 4 pages (Jessica)
 - A. The definition (Emergency management is the study of how humans and their institutions interact and cope with hazards, vulnerabilities, and resulting events, particularly through activities related to preparedness, response, recovery, and mitigation.)
 - B. Other definitions but why ours
 - C. Other disciplines and the uniqueness of this one
- III. Disciplinary Responsibilities and Values—2 to 3 pages (Jane)
 - A. The list and explanation of that list
 - B. The values
- IV. Core Research Domains—3 to 5 pages (Shirley)
 - A. What they are
 - B. Distinction between hazards/disaster research and emergency management research domains
 - C. Necessity of context
- V. Implementation—2 to 3 pages (Jane/Claire)
 - A. Dependent nature of what's being suggested here
 - 1. Steps being taken across high ed programs and individual programs
 - 2. Steps being taken across faculty and individual faculty
 - B. Implementation activities
- VI. Conclusion—1 to 2 pages (Jessica/Dave/Shirley)
 - A. Contingent nature of the future of the discipline
 - B. Recommended future actions
 - 1. Research Gaps to be Filled
- VII. Appendices—1 page each (Jessica)
 - A. Outlets for Emergency Management Research
 - B. Core Concepts

The final paper will have 1-inch margins; be double-spaced; be in 12-pt. Times New Roman font; use the APA citation style; offer explanation endnotes where needed; and use bolded font

with capitalized major words for main headings and bolded, italicized font for secondary headings.

All group members agreed to write their individual sections and deliver to Jessica by January 10, 2013. Jessica will put the document in Google Docs. Each group member will have a dedicated 2-week period to make their edits across the document.

- Dave January 14–25
- Claire January 28–February 2
- Shirley February 11–22
- Jane February 25–March 8
- Jessica March 11–22

Following the individual document review period, Jessica will provide a copy of the document as a Word file by email. Group members will have a 3-week period in which to make changes to the whole document using the Track Changes function in Word. The week of April 8, there will be a group a conference call to discuss final changes to be made. The group's goal is to have the completed paper to Barbara on April 29.

The group also discussed presenting its work in a panel presentation with all focus group members for a 1½-hour breakout session in the coming FEMA Higher Education Conference. Ideally, the group recommends that someone(s) from the group have an opportunity to do a short plenary session brief on the group's work before a follow-on breakout session presentation.

OBJECTIVE: Make recommendations for future meetings.

While the focus group was pleased with its progress, much work remains to be done if EM is to be an academic discipline in its own right. The FEMA Higher Education Project could support this work in a range of ways. For example:

- A variety of core concepts that must ground an emergency management education (e.g., hazard, vulnerability, resulting events (i.e., emergency, disaster, catastrophe, complex humanitarian crisis), stakeholder, etc.) are defined differently from book to book, article to article, EM program to EM program, and faculty member to faculty member. The lack of agreement as to what constitute the core concepts of EM as an academic discipline as well as how they are defined is a major issue from a disciplinary perspective as much as it is a significant source of frustration for students and faculty in EMHIED. The FEMA Higher Education Project could help EMHIED by sponsoring a focus group to discuss the core concepts that must ground emergency management higher education as well as their definitions and dimensions and develop materials to distribute across EMHIED to foster shared conceptualizations of the core concepts among faculty and students.
- The body of knowledge related to EM is vast. Contributors to the body of knowledge come from dozens of academic disciplines and disseminate their work in hundreds of journals, books, edited volumes and monographs, etcetera. Tens of thousands of pieces of literature related to hazards and disasters await collection, analysis, integration, and synthesis. These pieces lay waiting to be read by students and educators in EM. Yet, finding the body of knowledge is difficult to say the least. Challenges such as a lack of knowledge about hazards and disaster specific journals, the diversity of other outlets

where EM relevant work is published, search engines that do not recognize common EM keywords, and a lack of familiarity with how to locate the literature leave both students and faculty frustrated. The FEMA Higher Education Project could support the efforts of the higher education community to address this issue by sponsoring a focus group to discuss the development of 1) a short training course designed for both students and faculty as to what constitutes the emergency management body of knowledge and how to find it and 2) what should be included/will be required to build a database for emergency management specific literature.

- Most academic disciplines rely on a combination of large databases (e.g., EBSCO, Project Muse, ProQuest, Sage, Web of Science, and the like) and disciplinary specific databases to provide significant citations/articles in response to queries. As previously mentioned, the large databases do not respond well to common EM keywords and there are no discipline specific databases to support the development of the EM discipline. Development of such a database would require significant financial, technical, and logistical support. The FEMA Higher Education Project could sponsor an effort to engage academics, FEMA EMI Learning Resource Center representatives/library specialists, and IT specialists to explore what would be required to develop such a database and to what extent such a database might be developed in the near future.
- EM scholars and educators have the opportunity to gather once a year at FEMA's Annual Higher Education Conference; however, outside of the conference there exists no formal means of developing standards, addressing curriculum issues, discussion of issues and possible solutions, etcetera. Professional associations commonly provide both forms and forums for such discussions to take place on a regular basis. The FEMA Higher Education Project could sponsor a focus group to discuss the development of a professional association of EM scholars and educations including what would be required to develop such an association, how it should be structured, and a plan to develop an association in the near future.
- While there are a variety of scholarly, peer-reviewed journals related to EM (e.g., Journal of Emergency Management, International Journal of Emergency Management, Journal of Homeland Security and Emergency Management, etc.), there does not currently exist an outlet for articles related to the development of the EM academic discipline including how EM education should be approached in the classroom, curriculum design, theory development, communicating standards for research, etcetera. The FEMA Higher Education Project could support the efforts of the EM higher education community to address this issue by sponsoring a focus group to develop an (annual to start) Journal of Emergency Management Education and Theory to complement existing field-related journals.

Jessica Jensen, Assistant Professor in the Department of Emergency Management at North Dakota State University authored this report on behalf of the focus group. Please contact Jessica (ja.jensen@ndsu.edu or 701-131-5886) with feedback or concerns related to this report.



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Preface

Scholars within the emergency management higher education community have developed some consensus around the idea that emergency management is on a path to becoming an academic discipline in its own right. Building on existing consensus, an initiative began in 2012 to identify the components of academic disciplines and then begin to purposefully identify, recognize, formalize, and/or otherwise build those components for emergency management.

If emergency management is to be an academic discipline, then there are certain characteristics it must display. For instance, disciplines exhibit an identified disciplinary purview, a specified body of knowledge related to the purview, and theory related to the purview that provides means of understanding phenomena studied within the discipline, schema for organizing what is known, and grounding further research, core research questions. Research standards for how new knowledge is produced in the discipline and recognized must also exist.

The FEMA Higher Education Program sponsored two focus groups in 2012 to support the higher education community's efforts to formalize emergency management as an academic discipline. One focus group grappled with defining what emergency management is and does as a discipline (known as the disciplinary purview group); and, the other wrestled with what the research standards should be for the emerging discipline (known as the research standards group).

Documents were produced that report the discussion of both groups and their points of consensus (available at: https://training.fema.gov/emiweb/edu/emTheoryResearch.asp). The points of consensus cover three critical aspects of the emergency management discipline including a purview, core research foci, and standards for the conduct and publishing of research that specify how new knowledge is produced in the discipline and then recognized. Pending continued consensus building and revision, these documents have the potential to ground the further development of the discipline, the education of students, and emergency management research.

In 2013, the FEMA Higher Education Program again demonstrated its support of the higher education community's disciplinary efforts by sponsoring two additional focus groups. The first group, held July 23-24, 2013, was a follow-up to the 2012 Disciplinary Purview group and was intended to build upon its work. Specifically, the group's task was to identify the body of scholarship and research related to emergency management's purview that could ground the discipline, particularly as relates to the education of students. Participants in the focus group included:

Rick Bissell, University of Maryland, Baltimore County
Stephen Carter, University of Maryland University College
Daniel J. Klenow, North Dakota State University
Jessica Jensen, North Dakota State University (facilitator)
Jane Kushma, Jacksonville State University
David McEntire, University of North Texas
Joe Trainor, University of Delaware
William L. Waugh, Jr., Georgia State University and University of Nevada, Las Vegas

The focus group had two days of robust and productive discussion that resulted in the following:

- 1) Affirmation of the disciplinary purview suggested in the 2012 Disciplinary Purview Focus Group Report (with modification);
- 2) Identification of the topics that could be covered within emergency management degree programs that flow from the disciplinary purview, are grounded by significant scholarship and research, AND would benefit all students regardless of the career they pursue;
- 3) Exploration of the professional development needs of students seeking careers in emergency management and how those needs might relate to an emergency management education; and,
- 4) The skills that students graduating from an emergency management degree program ought to be able to demonstrate.

The following short report briefly reviews the group's discussion and includes appendices that identify the areas and topics about which scholarship and research exist to support student education, a range of professional development opportunities students might pursue depending on their intended emergency management career path, and skills students should be able to demonstrate upon graduating from emergency management degree programs.

The second focus group was a follow-up to the 2012 Research Standards group and intended to build upon its work. Specifically, the group's task was to explore how to transition the research standards into practice within individual emergency management degree programs and across the higher education community as a whole. The second focus group's discussion is reported in a separate document and can be found at

https://training.fema.gov/emiweb/edu/emTheoryResearch.asp.

Report

Initial Tests for Group Consensus

The focus group began with three tests for consensus. The first test for consensus was related to whether each person in the group supported the Draft Research Standards for the Academic Discipline of Emergency Management articulated within the 2012 Research Standards Focus Group Report. Consensus was sought because widespread buy-in by the higher education community will be required if we are to see research play a larger role within our degree programs as articulated in the 2012 Report. The group unanimously supported the Draft Standards.

As part of this test, the group discussed how the standards might be improved. There was agreement across the group that the following revisions/additions/topics be considered by the Research Standards Group in August, 2013 at EMI:

- 1) Add discussion in the preface regarding the extent to which the research standards represent something different or unique relative to the standards found in most social science disciplines.
- 2) Add discussion in the preface that articulates more broadly and appropriately the audience for the standards (i.e., not just those who conduct research but anyone who consumes research).
- 3) Add discussion in the preface regarding the difference between empirical research papers and analytical papers.
- 4) Consider whether it is appropriate to add a standard stipulating that a) in quantitative research, potential study participants ought to be provided the opportunity to review and comment on the data collection tool prior to data collection and b) in qualitative research, study participants ought to be provided the opportunity to review and comment on study findings prior to the dissemination of the study findings.
- 5) Consider whether standards for analytical papers should be developed. And, if so, consider whether the standards are best included as part of the Research Standards for Emergency Management or developed as a separate document.
- 6) Consider how guidance intended to support research being conducted in routine and disaster times might be provided.
- 7) Consider how guidance intended to help researchers cope with methodological challenges might be developed and disseminated.

The second test for consensus concerned whether the disciplinary purview of emergency management as articulated in the 2012 Disciplinary Purview Focus Group Report was supported by the group. The Report defined emergency management as "the study of how humans and their institutions interact and cope with hazards, vulnerabilities, and resulting events (i.e., emergencies, disasters, catastrophes, and complex humanitarian crises), particularly through activities related to preparedness, response, recovery, and mitigation".

The group fully supported the essence of the purview as articulated in the document but differed regarding some of the wording in the statement. After much discussion the following

modification was recommended: "Emergency management is the scientific study of how humans and their institutions interact and cope with hazards and vulnerabilities, and resulting events and consequences". The decision to eliminate the parenthetical statement was based on the logic that the word "events" automatically covers all types and scope of events.

The third test for consensus concerned whether the group supported the concept (introduced in the 2012 Report) that the academic discipline of emergency management has a responsibility to provide a broad education related to its disciplinary purview in a manner that would serve ALL students regardless of the career paths they might pursue in emergency management (e.g., local, state, federal government positions, international humanitarian or development organizations, domestic nonprofits, businesses) or within the distributed function of emergency management (e.g., citizens, public works employees, hospital administrators, elected officials, fire fighters, police officers, etcetera). The group unanimously supported this concept.

The Emergency Management Body of Scholarship and Research
Building on this consensus, the group began to explore the emergency management body of
knowledge and how it can inform an emergency management education.

The 2013 focus group concurred with the 2012 focus group which thought that "EMHIED should educate students on the basis of the vast and rich body of knowledge available" (Jensen, 2012, p. 3). It also, like the 2012 group acknowledged that:

- contributions to the body of knowledge have been made by scholars in a wide variety of disciplines (e.g., sociology, public administration, geography, anthropology, economics, political science, communications, engineering, psychology, public health);
- these contributions are distributed across countless books, scholarly peer-reviewed journal articles, and research center publications; and, further, that the EM body of knowledge is increasingly also found reflected in emergency management textbooks; and,
- the body of knowledge available has evolved over decades and will continue to evolve and expand as a diverse array of academic disciplines continue to explore hazards, vulnerabilities, and resulting events through their research and as EM scholars (i.e., those academics who identify themselves with the emerging discipline of emergency management and doctoral degree holders in emergency management) contribute to the body of knowledge through their own research;
- emergency management education would ideally be based upon the integration and synthesis of the existing scholarship and research. (Jensen, 2012, p. 3)

It became evident through the group's discussion that indeed a "vast and rich body of knowledge" (i.e., scholarship and research) related to the disciplinary purview of emergency management exists and can support student education in the following areas (at minimum): hazards, vulnerability, risk, events, preparedness, response, mitigation, and recovery.

The group brainstormed and later refined and organized into lists the topics related to the purview of emergency management about which there exists SIGNIFICANT scholarship and research. The lists cumulatively represent a distinct, specialized body of knowledge—a key

characteristic of academic disciplines. These lists are provided in Appendixes A-H following this report.

The group did not discuss how the topics ought to be covered within a curriculum (e.g., within the context of which courses, how covered by degree level). However, the group recommended that emergency management programs not currently teaching on the basis of this scholarship and research do so without delay. It was the group's belief that students educated based on the integration and synthesis of the scholarship and research related to these topics/areas will be uniquely positioned to contribute to a career in emergency management or elsewhere in the distributed function of emergency management as compared to those without such an education.

Professional Development and Emergency Management Career Paths

An emergency management education based on existing scholarship and research related to the topics in Appendices A-H stands to benefit all students' understanding of and ability to positively impact how humans interact and cope with hazards, vulnerabilities, and associated events and consequences. Yet, the group concurred that an education will not be enough for the student who desires a career in emergency management. These students must pursue professional development opportunities (e.g., training, certification) and opportunities to gain direct, hands-on management experience.

Through its discussion, it became clear to the group that the professional development and experience students would ideally pursue to complement their emergency management education may vary substantially from one student to the next. While there is some limited overlap, the professional development opportunities related to an emergency management career in a domestic nonprofit are not identical to those related to an emergency management career in a humanitarian assistance related organization, a business, or government.

Even where there are similarities, there are often differences. For instance, while the professional development of all students pursuing emergency management careers would be served by attendance of conferences, those a student seeking a career in business continuity would ideally attend would be different from those a student interested in government emergency management might attend. And, while training is a critical component of professional development (regardless of intended career path in emergency management), the specific training that would best benefit a student will vary. Training in fundraising and volunteer management might be important for a student seeking a career in the nonprofit realm; yet, the student seeking a career within local government would be better served by training related to the conduct of Threat Hazard Impact Risk Analyses in keeping with current policy and preparing a mitigation plan that would earn Federal Emergency Management Agency approval.

The professional development opportunities related to emergency management careers at each level of government (at least in the United States) are not the same either. Those employed in local government emergency management would ideally have extensive professional development in a wide array of areas because the tasks they are required to perform within their job are many and of different types (e.g., budgeting, human resources management, planning, hazard/risk/vulnerability assessment, exercise design, implementation, and evaluation, etc.). Emergency management positions in higher levels of government tend to be specialized and

require less of a range of knowledge and professional development, but greater depth. For instance, a position in the Federal Emergency Management Agency dedicated to Public Assistance (PA) would require extensive and intimate knowledge of the law, policy, and regulation related to PA as well as related to the structure of FEMA (e.g., hierarchy within the PDD versus within the regions or headquarters and organizing structures like Joint Field Offices). Yet, for the local emergency manager, familiarity with the same would be sufficient. Thus, even within government emergency management careers in the United States, professional development demands differ.

The group brainstormed what professional development students would ideally seek to be competitive for /highly competent in emergency management jobs in the four areas where an emergency management career can be pursued including government, humanitarian assistance, domestic nonprofits (e.g., Red Cross, Lutheran Disaster Response, Operation Blessing), and businesses. A lengthy, though not exhaustive, list was developed and is provided in Appendix I following this report.

The group recognized the significance of professional development to career success in emergency management. The group suggested that emergency management education programs would be wise to early and often sensitize their students who desire an emergency management career to the importance of professional development and the opportunities for different career areas. It would also be wise, the group suggests, for programs to inform students of the responsibility they bear for their personal professional development.

The group suggested that various aspects of professional development be incorporated within degree program curriculums as appropriate given the program overall direction/nature, degree level, faculty, and student body needs to support student development and provide an opportunity to allow students to apply the scholarship and research they are learning.

There was consensus across the group that, for various reasons, emergency management degree programs should not conceive of themselves narrowly as professional preparatory programs. One of the primary reasons noted is that it would not be possible for degree programs to address each of the professional development needs related to the plethora of emergency management careers within the auspices of a single degree program at any one level. Moreover, programs owe students the opportunity to learn about the significant, substantive, and topically varied body of scholarship and research that would benefit them in all emergency management career paths and provision of sufficient opportunity to learn that body of scholarship and research will not leave time for much else within a degree program.

Additionally, quality training is available through a range of institutions outside of academia and the training is typically delivered by individuals with significant experience doing whatever it is they are training others to do. While many individuals associated with higher education programs offer training in the field, there are also institutions offering training including the Federal Emergency Management Agency, state offices of emergency management, national nonprofits engaged in disaster work, international humanitarian organizations, and professional association that could help address the training needs of emergency management students. The current reality is that many of these institutions do not welcome the attendance of students who are not

affiliated with the organization at the training sessions they offer. This reality suggests both the opportunity and need for increased, and, perhaps, formal partnerships between higher education programs in emergency management and organizations offering training. These partnerships could be of great benefit to the professional development of students and the continued professionalization of the field at large.

Critical Skills as Opposed to Professional Development

The focus group determined that degree programs are not alone responsible for the professional development of students seeking emergency management careers. And, given the previous discussion, professional development may be part of degree program curricula to varying degrees and manifest in different ways, related to different career areas. The group did not believe that degree programs were without an obligation to develop skills in their students—quite the contrary. The group brainstormed and then discussed the specific skills that would benefit the career of any student taking emergency management courses. See Appendix J for this list. Assisting students in building these skills should be viewed as obligatory given the demand for thinkers, innovators, communicators, and collaborators both within emergency management and more broadly outside of emergency management.

Exactly how emergency management degree programs will convey the body of scholarship and research, incorporate professional development, and build skills will be different for the foreseeable future, for a variety of reasons. Nevertheless, if the emergency management higher education community accepts the disciplinary purview, recognizes the body of scholarship and research related to its purview, owns it, integrates it, synthesizes it, and begins to widely convey it to students, significant progress will have been made in the development of a discipline of emergency management and professionalization of the field.

The focus group discussed several ways the FEMA Higher Education Program might support the continuing efforts of degree programs to offer the best emergency management education possible including:

- Update existing college textbooks on the FEMA Higher Education Program website ensuring that they are thorough in their coverage of the scholarship and research and written in a broad enough way that reading of them would benefit a student seeking a career anywhere in emergency management or within the distributed function of emergency management.
- Sponsor a focus group that includes academics, FEMA EMI Learning Resource Center representatives/library specialists, and IT specialists to explore what would be required to develop an emergency management research database and the extent to which such a database might be developed in the near future.
- Convene a focus group to discuss the differences between training and education and develop a white paper that articulates these differences that both training and education institutions can utilize as a basis from which to understand what each does and how one complements the other.
- Create a curriculum development conference track that would include workshops related to designing program level objectives and degree program objectives, assessment, curriculum design, course content and syllabi development.

APPENDIX A. Hazard-Related Topics Supported by Significant Scholarship and Research

Hazards

- Types of hazards
- How hazards are defined
- How hazards are classified
- Hazard dimensions
 - o Range of duration
 - Speed of onset
 - o Typical predictability, seasonality, forewarning, and availability of perceptual cues
 - o Source of hazard impacts (e.g., in the case of a hurricane both wind and storm surge are sources of impacts)
 - o Related types of impacts to people, property, and/or the environment
 - o Range of geographic scope of hazard related events
 - o Range of magnitude and how measured
 - o Changes in hazard profiles due to climate and other global changes
- How hazards develop/evolve
- Methods for, and tools related to, hazard detection and monitoring
- Geography of hazards
- Hazard analysis
 - o General purpose
 - Underlying assumptions
 - Purpose for individuals/households, organizations (e.g., nonprofits and businesses), different levels of government, nations
 - Methods of conducting hazard analysis (including how to do it, supporting technologies, and strengths and weaknesses of various methods)
 - Use of hazard analysis results

APPENDIX B. Vulnerability-Related Topics Supported by Significant Scholarship and Research

Vulnerability

- Definitions of vulnerability
- Theoretical approaches to the conceptualization of vulnerability, evolution of approaches, and implications for scholarship and practice
- Significance of situational context in understanding what constitutes vulnerability
- Types of vulnerability
 - Social including
 - Broad issues that make people more prone to negative consequences from events like levels of education across the populace and aspects of culture
 - Issues specific to individuals that make them prone to harm such as a lack of transportation or poverty.
 - o Political
 - Economic
 - o Built (e.g., technology, infrastructure, homes, etc.)
 - Physical
- Levels of analysis related to vulnerability
 - o Individuals and households
 - o Organizations (e.g., nonprofits and businesses)
 - Local governments
 - o Regions (e.g., states in the United States and/or areas such as the Pacific Northwest)
 - Nations
 - o Global
- Concepts of special populations, vulnerable populations, and functional needs
 - Historical context of the concepts
 - Usefulness of the concepts
 - Application of the concepts
 - o Organizations that interact with individuals and households with functional needs
- Vulnerability analysis
 - General purpose
 - Underlying assumptions
 - o Vulnerability as interaction of capacity and that which makes us prone
 - Purpose for individuals/households, organizations (e.g., nonprofits and businesses), different levels of government, nations
 - Methods of conducting vulnerability analysis
 - Indicators of vulnerability
 - Sources of data
 - Methods of conducting analysis
 - Prediction of changing vulnerability profiles
 - Use of vulnerability analysis results
- Mapping vulnerability
 - Purpose
 - Methods of mapping
 - Technologies for mapping

APPENDIX C. Risk-Related Topics Supported by Significant Scholarship and Research

Risk

- How risk is defined
- Risk assessment
 - General purpose
 - Underlying assumptions
 - Purpose for individuals/households, organizations (e.g., nonprofits and businesses), different levels of government, nations
 - Methods of conducting risk assessment(including how to do it, supporting technologies, and strengths and weaknesses of various methods)
 - Use of risk assessment results
- Risk perception
 - o Meaning and significance of risk perception
 - Classification of risk choices
 - How individuals and households perceive risk and factors that explain their risk perceptions
 - Relationship of individual and household risk perception to preparedness, response, and mitigation actions and behaviors
 - How businesses perceive risk and factors that explain their risk perceptions
 - Relationship of business risk perception to preparedness, response, and mitigation actions
 - How local government perceives risk and factors that explain risk perception at that level
 - Relationship of local government risk perception to preparedness, response, and mitigation behaviors
 - o How nations perceive risk and factors that explain risk perception at that level
 - Relationship of national level risk perception to preparedness, response, and mitigation actions and behaviors
- Risk communication
 - Elements of effective risk communication messages related to preparedness, mitigation, and response
 - Methods of delivering risk communication messages
 - Factors related to receipt of risk communication messages by individuals and households
 - Factors related to individual and household behaviors/actions related to receipt of risk communication messages
- Risk education

APPENDIX D. Event-Related Topics Supported by Significant Scholarship and Research

Events

- Discussion of the words used to describe different kinds of events and how they are defined, operationalized, studied, and classified (e.g., crisis, emergency, disaster, catastrophe, complex humanitarian crisis, etc.)
- Events for individuals and households
 - o Defining what constitutes different types of events
 - Impacts and needs
- Events for organizations (e.g., nonprofits and businesses)
 - o Defining what constitutes different types of events
 - Impacts and needs
- Dimensions of events at a "community" level
 - o Defining what constitutes different types of events
 - o Impacts
 - o Needs
 - Hazard-generated
 - Response-generated
 - Emergence/convergence
 - Situational context of events
 - Interaction of vulnerabilities of different types and at different levels of analysis
 - Historical context
 - Political/policy context
 - National context
 - Who is involved
 - DRC Organizational Typology
 - Affiliated/unaffiliated/spontaneous volunteers
 - Domestic and/or international organizations
 - How event impacts, needs, situational context interact to determine who is involved in response and recovery
 - o Implications of impacts, needs, situational context, and who is involved for how events are managed in response and recovery
- Events for nations
 - o Defining what constitutes different types of events
 - Impacts and needs
- Global events
 - o Defining what constitutes different types of events
 - Impacts and needs
- Fundamental concepts
 - o Resilience
 - Sustainability
 - o Resistance
- Focusing events
 - o Definition
 - o Relationship of concept to response, recovery, mitigation, and preparedness

APPENDIX E. Preparedness-Related Topics Supported by Significant Scholarship and Research

Preparedness

- Defining preparedness
- Assumptions underlying conceptualizations of preparedness
- Individual and household
 - o Available/ideal preparedness actions/activities/behaviors including insurance
 - Factors related to when individuals and households undertake preparedness actions/activities/behaviors
- Organizations (e.g., nonprofits and businesses)
 - o Available/ideal preparedness actions/activities/behaviors
 - Factors related to when organizations undertake preparedness actions/activities/behaviors
- Local level government jurisdictions
 - Available/ideal preparedness actions/activities/behaviors (see common preparedness activities below)
 - o Influences on jurisdictional preparedness efforts
- National level
 - Historical evolution of emergency management systems, structures, laws, and policies in various countries
 - Historical events in various countries
 - Analysis of preparedness in various countries
- Common preparedness activities
 - Community education
 - o Preparedness campaigns
 - Training
 - Exercises
 - Planning
 - Elements of effective planning process
 - Components of plans
 - Shared components of all plans
 - Response-specific plan components
 - Recovery-specific plan components
 - Mitigation-specific plan components
 - Continuity-specific plan components
 - Characteristics/hallmarks of quality plans
 - Strategic versus operational planning
 - o Technologies for preparedness including warning technologies
 - Use/adoption of technologies
 - Utility of technologies
 - Limitations of technologies
 - Evaluating preparedness activities
 - Outputs/outcomes
 - Methods of evaluation (e.g., after action reports)

- Learning and emergency management
- Measuring preparedness
- International preparedness¹
 - o Evolution of emergency management as a function
 - o Evolution of emergency management as a career field
 - o Evolution of emergency management education and research
 - o International humanitarian assistance codes of conduct
 - o Connections/linkages between preparedness/mitigation and development
 - Role of key international organizations in the preparedness of nations around the world (e.g., United Nations, International Monetary Fund, World Bank, United States Agency for International Development, etc.)
 - o International information sharing and coordination systems (e.g., proposals for what might be developed and analysis of existing technologies/methods)

¹ The term international is used here as a means of organizing topics about which scholarship and research exist concerning efforts or issues that are global, cross-border, multi-national, or are otherwise related to the involvement of international organizations in emergency management. The term national above is used to organize topics about which scholarship and research exists about many nations around the world.

APPENDIX F. Response-Related Topics Supported by Significant Scholarship and Research

Response

- Individuals and Households
 - Components
 - Hazard detection
 - Protective action decision making
 - Protective action implementation
 - Preparatory actions
 - Protective actions
 - Withdrawal behavior (e.g., evacuation, sheltering, migration)
 - Post-disaster behavior and "myths"
 - Factors related to how/whether individuals and households undertake each component
 - o Individuals who work for response organizations (e.g., fire, law enforcement)
 - Socio-psychological impacts related to response involvement
 - Role abandonment
- Organizations (e.g., individual government department/agencies, nonprofits, businesses)
 - o Components
 - Activities undertaken to coordinate response within the organization
 - Activities undertaken to coordinate response with outside organizations
 - Activities related to provision/receipt of services/supplies/equipment
 - o Influences on how/whether organizations undertake each component
- Local level government jurisdictions
 - Components
 - Hazard and population monitoring
 - Damage assessment (e.g., windshield, first-in, aerial)
 - Communications and information management
 - Information processing
 - Media communications
 - Communicating with the public
 - Warning
 - Interagency communications
 - Incident management
 - Decision making
 - Leadership
 - Emergency operations centers
 - Resource management
 - Logistics management
 - Coordination off scene as well as across the whole event
 - Collaboration off scene as well as across the whole event
 - Improvisation/flexibility
 - Management systems (e.g., National Incident Management System, command and control versus other models)

- Operations
 - Coordination on scene
 - Collaboration on scene
 - Improvisation/flexibility
 - Management systems (e.g., Incident Command System)
 - Specific tasks (e.g., search and rescue, sheltering, firefighting, law enforcement, emergency medical care and triage)
- National response
 - Laws and legal issues
 - Corruption in relief provision
 - o Cultural and historical influences on national response
 - Policies, policy implementation, policy impacts (e.g., National Incident Management System)
 - Case studies of national response efforts to seminal events (e.g., in the United States, Hurricane Katrina)
 - National level organizations
 - Evolution of roles related to response (e.g., in the United States, Federal Emergency Management Agency)
 - Influences on national response
- International response²
 - o Laws and legal issues
 - o Standards, ethics, and accountability
 - o Corruption in humanitarian assistance
 - Codes of conduct and response
 - o "Response" involvement of development organizations versus humanitarian assistance organizations
 - Media coverage of international events and international response/recovery efforts and consequences of coverage (e.g., perceptions, donations)
 - o Structuring mechanisms and organizational tools for international response/recovery
 - o Coordinating bodies in international response/recovery

² The term international is used here as a means of organizing topics about which scholarship and research exist concerning efforts or issues that are global, cross-border, multi-national, or are otherwise related to the involvement of international organizations in emergency management. The term national above is used to organize topics about which scholarship and research exists about many nations around the world.

APPENDIX G. Recovery-Related Topics Supported by Significant Scholarship and Research

Recovery

- Individual and households
 - o Impacts including socio-psychological impact, housing, livelihood
 - Needs particularly those related to socio-psychological support, refugees, and internally displaced persons
 - Sources of assistance
 - o Experience with sources of assistance
 - Factors influencing recovery
- Organizations
 - o Nonprofits
 - Landscape of nonprofit organizations and relationship to recovery
 - Roles in recovery (including significant literature related to sheltering, case management, socio-psychological support, donations management, and volunteer management)
 - Influences of nonprofits on local level/community recovery
 - Challenges to recovery participation
 - Businesses
 - Roles in recovery (e.g., consulting, rebuilding, economic engines, etc.)
 - Factors influencing business recovery
- Local level government jurisdictions/"community"
 - o Case studies of local level/community recovery around the world
 - Social capital and community recovery
 - Leadership in recovery
 - Politics of recovery
 - Demographic impacts
 - Litigation in recovery
 - o Change and recovery (e.g., social, political, environmental)
 - Tasks and influencing factors
 - Damage assessment
 - Debris management
 - Continuity/recovery of government services
 - Re-occupancy/permitting
 - Post-event recovery planning
 - Housing recovery
 - Infrastructure recovery
 - Economic recovery
 - Environmental recovery/protection/preservation
 - Cultural/historical resource recovery/protection/preservation
- National level
 - Demographic impacts
 - o Economic impacts/recovery

- Approaches to assistance
- o Laws (e.g., in the United States, the Stafford Act)
- Policy development, policy implementation, policy impacts (e.g., in the United States, National Disaster Recovery Framework)
- Politics (e.g., in the United States, politics related to Presidential Disaster Declarations)
- International recovery³
 - Laws and legal issues
 - o Standards and accountability
 - Codes of conduct
 - "Recovery" involvement of development organizations versus humanitarian assistance organizations
 - Media coverage of international events and international response/recovery efforts and consequences of coverage (e.g, perceptions, donations)
 - o Structuring mechanisms and organizational tools for international response/recovery
 - o Coordinating bodies in international response/recovery

³ The term international is used here as a means of organizing topics about which scholarship and research exist concerning efforts or issues that are global, cross-border, multi-national, or are otherwise related to the involvement of international organizations in emergency management. The term national above is used to organize topics about which scholarship and research exists about many nations around the world.

APPENDIX H. Mitigation-Related Topics Supported by Significant Scholarship and Research

Mitigation

- Cost-benefit analysis
 - o Purpose
 - Assumptions underlying
 - Methods for conducting
- Individuals and households
 - Mitigation options
 - Relationship between mitigation options and hazard types
 - Theories that help explain the extent to which individuals and households adopt mitigation measures
 - o Rates of individual and household implementation of mitigation measures
 - o Factors related to individual and household implementation of mitigation measures
- Businesses
 - Mitigation options
 - Relationship mitigation options to hazard types
 - o Theories that help explain the extent to which businesses adopt mitigation measures
 - o Factors related to business implementation of mitigation measures
- Local level government jurisdictions/ "communities"⁴
 - Mitigation options
 - Community protection works
 - Types
 - Design
 - Relationships to hazard types, both current and under changing conditions (e.g., climate change)
 - Factors influencing implementation
 - Building contents protection
 - Types
 - Design
 - Relationships to hazard types
 - Factors influencing implementation
 - Building construction
 - Types
 - Design
 - Relationships to hazard types
 - Factors influencing implementation
 - Hazard source control
 - Types
 - Design

⁴ Of note, a significant body of literature regarding mitigation plan development and quality exists; yet, since planning was referred to within the preparedness appendix, it is not repeated again here.

- Relationships to hazard types
- Factors influencing implementation
- Land use practices
 - Types
 - Design
 - Relationships to hazard types
 - Factors influencing implementation
- Public awareness and education
- o Ethical considerations related to mitigation
- o Cultural considerations related to mitigation
- o Legal considerations related to mitigation
- o Impact of mitigation projects (e.g., financial, performance)
- Regional level
 - o Policy design, policy implementation, policy impact (e.g., in the United States, state level mandates to develop mitigation plans and impact of those mandates)
- National level
 - o Laws and legal issues
 - Policy design, policy implementation, policy impact (e.g., in the United States, Community Rating System and National Flood Insurance Program)
 - Limits on mitigation in different national scenarios
- International level⁵

Influence of international organizations on mitigation within countries around the

- Cross border engagement in mitigation activities
- Kinds of technical assistance that can help poorer countries develop effective mitigation programs

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⁵ The term international is used here as a means of organizing topics about which scholarship and research exist concerning efforts or issues that are global, cross-border, multi-national, or are otherwise related to the involvement of international organizations in emergency management. The term national above is used to organize topics about which scholarship and research exists about many nations around the world.

APPENDIX I. Areas for Training and Professional Development Depending on Career Goals

Depending on the sector in which a student desires to work/increase professionalism related to, it may be to their advantage to become familiar with/competent using/applying the following professional development opportunities (e.g., training).

| | U.S. | Intl | Dom. | Bus. |
|--|-------|------|------|-------|
| | Gov't | Hum. | NPO | Cont. |
| Access monitoring, methods, and technologies for networks, buildings and facilities | X* | | | X |
| ANSI-ASQ National Accreditation Board (ANAB) certification (i.e., PS-PREP or | | | | X |
| Accreditation for Organizational Resilience-Emergency Management-Business | | | | |
| Continuity Management Systems) | | | | |
| ASIS SPC.1-2009 Organizational Resilience: Security Preparedness, and Continuity | | | | X |
| Management System | | | | |
| Attendance of professional conferences | X | X | X | X |
| British Standard 25999-2:2007 Business Continuity Management | | | | X |
| Budgeting and financial management software | X* | | | |
| Business continuity software | | | | X |
| Case management certification (e.g., CCM) | | X | X | |
| Emergency management certification (e.g., CEM) | | | | |
| Change management | X | X | X | X |
| Client/case management software | | X | X | |
| Information processing and communications equipment and technologies (e.g., | X^* | X | X | X |
| telephones, computers, word processing software, electronic mail management systems) | | | | |
| Cluster coordination model | | X | | |
| Compassion fatigue training | X* | X | X | |
| Conflict management | | X | | |
| Contracts and procurement | X* | | | X |
| Current government risk assessment tools (e.g., THIRA) | X* | | | |
| Current government planning frameworks (e.g., National Response Framework, | X | | X** | X** |
| National Disaster Recovery Framework) | | | | |
| Current news regarding events around the world (e.g., IRIN, Prevention Web, | | X | | |
| ReliefWeb, Global Disaster Alert and Coordination System) | | | | |

| | U.S. | Intl | Dom. | Bus. |
|---|-------|------|------|-------|
| | Gov't | Нит. | NPO | Cont. |
| Current presidential policy directives | X | | X** | X** |
| Damage assessment (e.g., related to receipt of a Presidential Disaster Declaration) | X* | | | 37 |
| Data protection and information security monitoring, methods, and technologies | X* | | | X |
| Debris management related to Emergency and Presidential Disaster Declarations | X* | | ** | *** |
| Development and implementation of mutual aid agreements | X* | | X | X |
| Donations management software (e.g., AidMatrix) | | X | X | |
| eGrants system (e.g., navigation, applications) | X* | | | |
| Employee protection strategies (e.g., workplace violence prevention) | | | | X |
| Emergency Management Accreditation Program standards and certification | X* | | | |
| Emergency management-related laws and regulations | X | X | X | X |
| Emergency Operations Center (EOC) design and equipment | X* | | | X |
| Exercise development and implementation | X | X | X | X |
| Federal grants (i.e., range of grants and purposes, grant guidance, grant applications) | X* | | | |
| Federal recovery assistance programs related to Presidential Disaster Declarations (i.e., Public Assistance, Individual Assistance) | X* | | X | |
| Federal Emergency Management Agency Independent Study Professional Development Series | X | X | X | X |
| Federal Emergency Management Agency's floodplain map program | X* | | | |
| Fundraising strategies | | X | X | |
| Geographic information system mapping | X* | | | |
| Government agencies and professional groups that monitor and research hazards | X | X | X | X |
| Grant writing and administration | X | X | X | |
| Hazard analysis software/tools (e.g., HAZUS) | X* | | | X |
| Hazard-related laws, regulations, and liability | X | X | X | X |
| Homeland Security Exercise and Evaluation Program (HSEEP) | X* | | | |
| Humanitarian logistics management strategies and software | | X | | |
| Human resource management | X | X | X | X |
| Human rights and humanitarian assistance law | | X | | |
| Humanitarian Accountability Project International Organization for Standardization | | X | | |

| Hyogo Framework Incident management software (e.g., WebEOC) X* X* X** X** X** International humanitarian assistance coordination organizations such as International Council of Volunteer Agencies, United Nations Office for the Coordination of Humanitarian Affairs (OCHA), Inter-Agency Standing Committees for Humanitarian Affairs (OCHA), Inter-Agency Standing Committees (e.g., roles, membership, organizing mechanisms) International needs assessment initiatives (e.g., Operational Guidance on Coordinated Assessments in Humanitarian Crises, Humanitarian Dashboard) International Organization for Standards (ISO) 22301: 2012 Societal security Business continuity management systems International Red Cross and Red Crescent Movement 1994 Code of Conduct X* Integrated Public Alert and Warning System (IPAWS) Key development organizations such as USAID, IMF, World Bank (e.g., mission, structure, history) Key humanitarian response organizations such as the United Nations, NATO (e.g., mission, structure, history) Local emergency management related ordinances Marketing X* X* X* X* Mitigation planning guidance (e.g., the blue book) X* National Fire Protection Association 1600: Standard on Disaster / Emergency X Aganagement and Business Continuity Programs National Flood Insurance Program and Community Rating System National Flood Insurance Program and Community Rating System National Incident Management System Other hazard modeling software Other hazard modeling software Other hazard modeling software Other hazard modeling software National Conduct for NGOs X Fepole in Aid Code of Good Practice X X X X X X X X X X X X X | | U.S. | Intl | Dom. | Bus. |
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| Oxfam Code of Conduct for NGOs X People in Aid Code of Good Practice X | | X | | | |
| People in Aid Code of Good Practice X | | | X | | |
| 1 | | | | | |
| | Personal security awareness | | X | | |

| | U.S. | Intl | Dom. | Bus. |
|---|-------|------|------|-------|
| | Gov't | Нит. | NPO | Cont. |
| Planning certification (e.g., AICP) | X | | | X |
| Policies and laws pertaining to working with individuals with functional needs | X | | X | |
| Policies and laws related to working with pets | X | | X | |
| Preliminary Damage Assessment related to Presidential Disaster Declarations | X | | | |
| Professional associations (i.e., membership, conference attendance, and service) | X | X | X | X |
| Professional certifications (e.g., DRII, BCI, CEM) | | | | |
| Professional engagement through reading and contributing to blogs, keeping up with scholarship (e.g., Natural Hazards Observer) | X | X | X | X |
| Program management certification (e.g., PgMP) | X | X | X | X |
| Project management certification (e.g., CAPM, PMP) | X | X | X | X |
| Project Qualite | | X | | |
| Regional multinational disaster organizations (e.g., Asian Disaster Reduction Center) | | X | | |
| Regulated industries and laws and policies related to them | X* | | | X** |
| Response planning guidance (e.g., CPG 101) | | | | |
| Social media for preparedness, response, mitigation, and/or recovery | X | X | X | X |
| Sphere Project Humanitarian Charter and Minimum Standards in Disaster Response Handbook | | X | | |
| State emergency management-related laws | X* | | X | X |
| State hazard-related laws | X* | | X** | X** |
| State emergency management policies and guides | X* | | X** | X** |
| Supply chain risk management strategies | | | | X |
| Video surveillance monitoring, methods, and technologies (e.g., CCTV, analog, IP and digital cameras and systems) | | | | X |
| Voluntary Private Sector Preparedness Accreditation and Certification Program (PS-Prep) | | | | X |
| Voluntary Organizations Active in Disaster (e.g., NVOAD, SVOADs) | X | | X | |
| Volunteer management certification (e.g., CVA) | | X | X | |
| Volunteer management software | | X | X | |
| Warning system equipment and technologies | X* | | | |

^{*} The extent to which a student would pursue professional development opportunities related to this will depend on the level of government they wish to be employed at and the job responsibilities of specific positions.

** The extent to which a student would need professional development opportunities related to this will vary significantly across organizations and positions.

APPENDIX J. Skills Emergency Management Students Should be Able to Demonstrate upon Graduation

- 1. Verbal communications
- 2. Written communications
- 3. Interpersonal communication
- 4. Group communication
- 5. Network building and stakeholder engagement
- 6. Analytical thinking
- 7. Application of research in practice
- 8. Problem solving
- 9. Decision making
- 10. Leadership

Synergy between Training and Education: Advancing the Dialogue and the Efforts

Appendix B





I Feel Your Pain

How and why the Academic and Professional Communities Must Work Together



- Illustrate the differences between scholars and practitioners
- Discuss the common problems we are facing
- Identify recommendations on working together

The Gulf





Common Problems

- Awareness
- Fractured identity
- Organizational location
- Nonassertiveness
- Fluctuating policies
- Apathy

- Cash-cow mentality
- Limited budgets
- Insufficient personnel
- Overwhelming workloads



- Academic Setting
 - University leaders do not understand the nature of emergency management degrees





Awareness (cont.)

- Academic Setting
 - University leaders do not understand the nature of emergency management degrees
- Practitioner Setting
 - Politicians are not familiar with the emergency management function

 Lack of awareness leads to a lack of support



Fractured Identity

- Academic Setting
 - Disaster scholars and EM programs are multi-disciplinary









Fractured Identity (cont.)

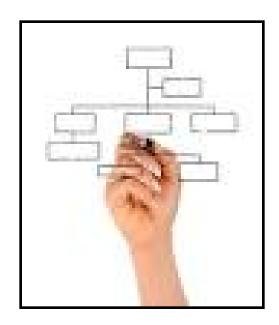
- Academic Setting
 - Disaster scholars and EM programs are multi-disciplinary
- Practitioner Setting
 - EM is spread across many agencies and organizations

 Fractured identity results in a failure to appreciate shared responsibility



Organizational Location

- Academic Setting
 - EM programs could be located in various departments or colleges, or as independent units





Organizational Location (cont.)

- Academic Setting
 - EM programs could be located in various departments or colleges, or as independent units
- Practitioner Setting
 - EM programs could be located in various departments, under the executive office, or as an independent unit

Location may constrain organizational aspirations



Nonassertiveness

- Academic Setting
 - Others like university officials often dictate the boundaries of EM education





Nonassertiveness (cont.)

- Academic Setting
 - University officials often dictate the boundaries of EM education

- Practitioner Setting
 - Policies and standards are determined by our elected leaders

 Allowing others to define who we are or what we do produces questionable policies and practices



Fluctuating Policies

- Academic Setting
 - Scholars are often confronted with divergent marching orders due to new administrators





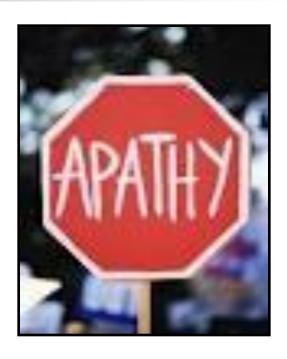
Fluctuating Policies (cont.)

- Academic Setting
 - Scholars are often confronted with divergent marching orders due to new administrators
- Practitioner Setting
 - Practitioners are faced with continually evolving federal mandates

Fluctuating policies interrupts or halts progress



- Academic Setting
 - Department and college leaders may not view EM as a legitimate discipline





Apathy (cont.)

- Academic Setting
 - Department and college leaders may not view EM as a legitimate discipline
- Practitioner Setting
 - City leaders do not appreciate EM until a disaster occurs; attention disappears as time goes by

 Apathy makes the achievement of objectives difficult or impossible



Cash-Cow Mentality

- Academic Setting
 - University officials see EM as a way to bring in resources without investments





Cash-Cow Mentality (cont.)

- Academic Setting
 - University officials see EM as a way to bring in resources without investments
- Practitioner Setting
 - Politicians support
 EM to the extent that grants are acquired

 The pursuit of monetary resources overshadows programmatic goals



Limited Budgets

- Academic Setting
 - EM programs are run on shoe-string budget





Limited Budgets (cont.)

- Academic Setting
 - EM programs are run on shoe-string budget
- Practitioner Setting
 - EM programs do not have resources until a disaster occurs

Consequence #8

 Insufficient funds make is challenging to carry out mission or reach potential



Insufficient Personnel

- Academic Setting
 - EM programs have limited full-time faculty and often rely on adjuncts





Insufficient Personnel (cont.)

- Academic Setting
 - EM programs have limited full-time faculty and often rely on adjuncts
- Practitioner Setting
 - Those working in EM programs have insufficient personnel in comparison to guidelines or demands

Consequence #9

 Insufficient personnel limits the ability to get the job done correctly or completely



Demanding Workloads

- Academic Setting
 - Professors have a plethora of responsibilities





Demanding Workloads (cont.)

- Academic Setting
 - Professors have a plethora of responsibilities

- Practitioner Setting
 - EM professionals have many duties

Consequence #10

 Overwhelming workloads produce a situation where duties and responsibilities are neglected



Implications for the Future

 Accept and support each other through awareness, marketing and advocacy



Implications (cont.)

- Accept and support each other through awareness, marketing and advocacy
- Increase the reach and extent of impact in education and training



Implications (cont.)

- Accept and support each other through awareness, marketing and advocacy
- Increase the reach and extent of impact in education and training
- 3. Develop further professional KSAs



Implications (cont.)

- Accept and support each other through awareness, marketing and advocacy
- Increase the reach and extent of impact in education and training
- 3. Develop further professional KSAs
- Improve the management of our respective programs



A Call to Action

"We're not gonna take it!"





Concluding Thoughts

- Yes, there are differences
- We face similar problems
- Scholars and practitioners must work together and support one another

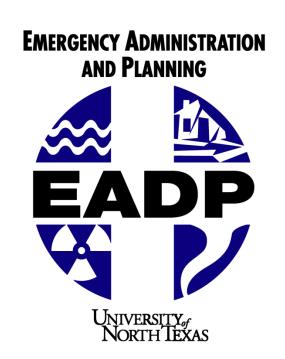


Bridging the Gap





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Synergy between Training and Education: Advancing the Dialogue and the Efforts

Appendix C

Integrating Training and Education for Increased Professionalism

Karen Adkins and David McEntire

Important efforts are currently being taken to bridge the gap between scholars and practitioners in emergency management. The goal of this integration is to improve professionalism for individual practitioners and the entire emergency management system as a whole. One of the vital and necessary steps to make this happen is to better understand the differences and similarities among training activities and education initiatives in the profession. Comprehending this unique relationship encourages synergy and will ultimately enable us to accomplish our joint goals in emergency management.

Differences in Training and Education

Education is a crucial way to increase the professionalism of future and existing emergency managers. Education includes formal learning and the acquisition of knowledge through general education requirements and disciplinary foundations. Education is provided by community colleges and universities, and may occur on campus or through an online format. Courses are often based on an academic calendar, and earning a degree requires two to four (or more) years for completion. Education summarizes existing principles which are derived from scholarship, research and empirical data. The purpose of education is to enhance critical thinking, problem solving abilities and cultural literacy. Education also results in academic credit and a degree, and opens up additional leadership and management opportunities in one's career. However, the central objective of education is to help the student obtain broad based knowledge, skills, and abilities as well as acquire specific competencies related to emergency management. Education therefore plays an important role in advancing emergency management.

Training is another vital method to improve emergency management. Training is professional development that conveys relevant and useful information that helps emergency managers perform specific job duties. Training provides practitioners with new information and reinforces existing knowledge pertinent to their position as well as practical skills based on long-standing or recently identified best practices. Training courses are typically offered by emergency management organizations including, but not limited to, FEMA (the Emergency Management Institute), state and regional emergency management agencies, and other partners that work with the profession. In contrast to education, training is typically of short duration, and lasts only hours, days, or one or two weeks. Training may result in certification or Continuing Education Units (CEU). For this reason, training also advances career opportunities and opens up new responsibilities for those working in emergency management. The primary goal of training is to help emergency managers be aware of best practices, follow legislative

mandates, implement standard operating procedures and improve performance. Ongoing training for emergency managers is therefore imperative in an ever-changing disaster environment.

Similarities between Education and Training

Although there are significant differences between education and training, they both share at least three similarities. First, education and training increase professionalism in the emergency management workforce. Education generally helps individuals acquire foundational knowledge at the beginning of their career, while training provides unique information and enhances skills for those already employed in the field. Second, education and training each improve the administration of emergency management programs and activities. Education can help an emergency manager glean lessons from prior disasters and think strategically about the future of his or her program, while training provides specific guidelines to adhere to the recommended activities expected within today's emergency management system. Finally, education and training both help to decrease vulnerabilities and augment capabilities. The overall purpose of each activity is to reduce the probability of disasters and increase our ability to react when they occur.

Working Together to Advance the Profession

Because education and training both have the ultimate goal of increasing professionalism in emergency management, generating synergy between training and education is everyone's responsibility. Scholars and practitioners must therefore seek out and take advantage of opportunities to support one another in our shared vision of emergency management. Recommendations for collective action are available through FEMA's Higher Education Program and the International Association of Emergency Managers (provide citations).

Synergy between Training and Education: Advancing the Dialogue and the Efforts

Appendix D

Do 1 Thing

Ways to Contribute to Emergency Management Training and Education Synergy

It is the responsibility of everyone in both higher education and practice to contribute to emergency management training and education synergy. We don't all have to do the same thing—the key is that we all do at least one thing and sustain it over time.

→ Ideas for *Training* Partners and Practitioners

- Meet and develop a relationship with people in emergency management higher education programs
- Offer to host student interns to support their professional development and enhance their classroom education
- Mentor college students that are interested in your emergency management career path
- Invite students to attend emergency management training
- Encourage student professional development by introducing students to your emergency management professional network
 - Promote the value of an emergency management education as a complement to relevant training and experience
- Invite students and faculty to participate in exercises, planning efforts, hazard, risk, and vulnerability assessments, and after action reviews
 - Invite higher education partners to present at practitioner conferences
- · Invite emergency management scholars to design and deliver training
 - Allow emergency management researchers to conduct research on your jurisdiction's emergency management activities
- Subscribe to EM academic journals for the benefit of all staff
 - As personal and professional circumstances permit, emergency managers should consider taking an emergency management higher education course

Do 1 Thing

Ways to Contribute to Emergency Management Training and Education Synergy

It is the responsibility of everyone in both higher education and practice to contribute to emergency management training and education synergy. We don't all have to do the same thing—the key is that we all do at least one thing and sustain it over time.

Ideas for **Education** Partners and Scholars +

• Meet emergency managers from various sectors in your local area, state, and region

- Form an advisory board comprised of practitioners from different emergency management practice settings and specialties
 - Promote internships that allow students to develop skills and additional knowledge related to the sector in which they desire a career
- Join local, state, and/or regional emergency management associations and volunteer for committees
 - Attend practitioner conferences and pursue offers to present at those conferences
- Collaborate with practitioners to identify research projects that would be useful to them
 - Share research findings in practitioner-valued outlets
- Offer continuing education opportunities that would help practitioners earn and maintain emergency management certifications
 - Make students aware of various career paths in emergency management and professional development needs related to those paths
- Invite practitioners to be guest speakers in academic courses
- Invite practitioners to present at conferences or other academic meetings, or, better yet, co-present with them
- Identify service learning opportunities that benefit both students and practice
 - Make internships in emergency management a degree requirement

*********TELL US THE 1 THING YOU ARE DOING @ emgtresearcher@gmail.com**