



PROCEEDINGS *of the*

21st Annual

Emergency Management Higher Education Symposium

Highlighting Diversity, Inclusion, and Unity of Effort

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FEMA

TABLE OF CONTENTS

SYMPOSIUM OVERVIEW

Message from Program Manager	1
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PRE-SYMPOSIUM WORKSHOPS

Change the Conversation: Change the Culture <i>Lee Rush</i>	2
Integrating the Next Generation Core Curriculum into Your Assessment and Accreditation Strategy <i>Jamie Earls, Caroline Hackerott, Sandy Maxwell Smith</i>	4
SoTL: Teaching and Research Don't Have to Be Separate <i>Caroline Hackerott, Shirley Feldmann-Jensen, Claire Connolly Knox</i>	6
What to Teach in Emergency Management <i>David McEntire</i>	11

TRACK 1: PROGRAM POLICY & ADMINISTRATION

Career Pathway Success: It Starts on Day One <i>Carol Cwiak, Sarah Kirkpatrick</i>	13
Comprehensive Academic Program Review: Homeland Security and Emergency Management Degrees <i>Kenneth Christopher</i>	15
Job Placement of Recent Emergency Management Graduates <i>Jessica Jensen, Sarah Kirkpatrick</i>	16
Homeland Security Enterprise's Duty to Prepare for Climate Change <i>John Comiskey, Michael Laranagga</i>	19
Teaching Tenure and Dissertations: How Can I Possibly Accomplish Everything? <i>Shawn Bayouth</i>	22

TRACK 2: RESEARCH METHODOLOGY & INTEGRATION

Analysis of Buyout Properties – Are the Headlines Correct? <i>Eric Best</i>	24
Are Higher Education Programs Incorporating FEMA's Next Generation Core Competencies? <i>Jason Cohen</i>	26
Increasing Resiliency in the Healthcare and Public Health Sector <i>Rosemary Hartofilis, Bernard Jones</i>	28
Understanding International Cultural Competencies in Disaster Planning and Response <i>Thomas Carey, Ali Gheith</i>	31

TRACK 3: SCHOLARSHIP OF TEACHING & LEARNING

Building Cultures of Preparedness: Teaching & Learning Culture-Based Approaches in EM <i>Laura Olson, Eric Stern</i>	33
Collaborative Instructional Design <i>Beth Gray, Caroline Hackerott</i>	36
Competent Action: Why We Should Care About Immersion and its Effects on the Individual <i>Debra Kreisberg</i>	39
Creating Change Agents: Developing Leadership Skills in the Classroom <i>Carol Cwiak</i>	43
Critical Infrastructure Organizational Resilience – A Focus on Law Enforcement First Responders <i>Harold Broderick, Bernard Jones</i>	45

Exploring the Current and Future Uses of Storytelling in Emergency Management Education <i>Alessandra Jerolleman</i>	48
Integrating the Core Competencies of Resilience into Engineering Education <i>Richard Fosse</i>	50
Merging Academia and the Professions in Multidisciplinary, Online Graduate Programs <i>Maeve Dion</i>	52
Resilience and Emergency Management: Exploring the Psychological Dynamics of Leadership <i>Antoinette Collarini Schlossberg, Bernard Jones</i>	56
Setting a Context for Discourse in the Emergency Services Classroom <i>Melissa Meyers</i>	60
Storytelling: Enhancing Emergency Management Learning in Native Populations <i>Jim Cedeno, Norlean Cedeno</i>	64
The Benefits and Challenges of Living, Teaching, and Working in Today’s Diverse World: Revisited <i>Norma Jones, Linda Martinez, Henry O’Lawrence, Dale Sanders</i>	68
The Current State of University-Based Disaster Management Courses in the U.S. - Opportunities <i>Kandra Strauss-Riggs, Gerald White, Thomas Kirsch</i>	72
The Role of Emergency Management in the Early College Strategy <i>Elizabeth Duffy, Kathy Francis, Sam Lombardo, Diana Sung</i>	74
University Youth Leadership in Hurricane Recovery in the Virgin Islands <i>Michele Guannel, Michelle Peterson, Imani Daniel, Greg Guannel, Elizabeth Jaeger</i>	76
Using Manipulatives in the Higher Ed Classroom <i>Frannie Edwards, Dan Goodrich</i>	80
Writing EM Case Studies for Use in Academic Settings – A Look at the Rhode Island Night Club Fire Preparedness as a Case Study Teaching Template <i>Kevin Kupietz</i>	83
 SPECIAL INTEREST GROUPS	
Case Teaching and Learning SIG <i>Dianne Walbrecker, Kevin Kupietz, Mary Anne Lyle</i>	85
Planning Resource for Developing a Two-Year Emergency Management Program <i>Kathy Francis, Alan Lyons Patricia McIntosh</i>	87
Emergency Management Theory and Research SIG <i>Ray Chang, Joel Palmer</i>	88
Student Perspectives SIG <i>Terry Cooper</i>	90
Appendix A: Alternate Text	92

Message from Program Manager

Dearest Emergency Management & Homeland Security community of practice,

I am thrilled to be sharing this compendium of write-ups from our 2019 21st Annual Emergency Management Higher Education Symposium. This is the second year we have worked to develop a proceedings document conveying the work presented, the questions posed, and outcomes noted at our annual gathering. This year we received 34 session submissions, which is an outstanding increase from our inaugural proceedings document which highlighted 17 sessions. Our theme this year, “Diversity, Inclusion, and Unity of Effort” provided us with a broad focus to see the myriad perspectives and possibilities to evolve the academic discipline, research, and professional practice of emergency management.

This proceeding, like the symposium, begins with pre-symposium workshops, followed by sessions aligned with the three tracks: Program Policy and Administration; Research Methodology and Integration; and the Scholarship of Teaching and Learning and reports from some of our Special Interest Group (SIG) sessions. There is much to be learned in the pages that follow and I believe it’s poignant to read the last report from the Student Perspective SIG that synthesizes their take-away in a single word: “opportunity.” SIG lead, Terry Cooper, states, “The opportunities afforded to students (and professionals) who attend the Higher Education Symposium, truly cannot be found anywhere else.” I hope you will take this opportunity to dive into these pages for knowledge, understanding, and inspiration. I also hope you will see this as a welcoming invitation to become more involved in this passion and focused learning community of practice who are advancing the emergency management profession through education!

This document is a gift from the community to the community, and I expect all will find it valuable, especially those of you who were not able to join us. I look forward to your comments and contributions and hope to see you in 2020 at our next symposium!

With Kindest Regards,

Wendy Walsh

A special thanks to Dr. Bernard Jones for his efforts in editing and formatting these proceedings.

CHANGE THE CONVERSATION: CHANGE THE CULTURE

Lee Rush, M.Ed.; justCommunity, Inc.

This session sought:

- To (re)define leadership as the art of convening and offering refreshing, mildly anxiety-producing questions to open up new possibilities;
- To learn how to better predict the future by learning how to “change the past;” and
- To experience a novel way to organize a gathering so that transformation can occur.

Description of Presentation:

Based on the work of Peter Block (*Community: The Structure of Belonging*), this workshop introduces six essential conversations that create possibilities for personal transformation and organizational change. Each of these conversations grows out of thought-provoking questions. Key points will address: the power of invitation and why choice always trumps mandates, the power of possibility and why we need to stop worshipping at the altar of problems and start imagining new possibilities, the power of refusal and to grasp the fact that if we cannot say no to something, our yes means nothing, and finally, the power of gifts and why when we start to focus on gifts rather than deficiencies, everything changes.

This methodology is called “A Small Group” and has been used across the world in business sectors, educational settings, community grassroots organizing meetings, collaborative problem-solving sessions, faith community gatherings, and recently in cities exploring the development of “economies of compassion” or neighbor-to-neighbor connection efforts.

My approach to building “restorative communities” is centered on the belief that global change occurs at the local level. Participants will be asked a simple question at the beginning of the workshop—“Do you want to change the world?” Of course, the answer is usually “yes.” The follow-up question is, “How do we go about that task?” The answer is “One room at a time and this is the room for today.”

This workshop will then unpack the six essential conversations to have and teach participants both the physical structure (room layout) and the linguistic mechanisms to use to initiate such change. Each participant will be provided with a 35-page booklet outlining the protocols and methods used.

Come and enjoy less PowerPoint and more Powerful Conversations. Participants will learn a process they can use immediately in their efforts for true social change.

Number of Participants: 17

Questions: NA

Noted Outcomes:

Here are two comments I received after the workshop that pretty much sum up the most important outcome of the gathering:

 Emergency Management Institute



Jones, Patricia (pjones26) <pjones26@Tnstate.edu>
 jrush@justcommunity.com
 Monday, June 10, 2019 at 10:08 AM
[Show Details](#)

Good morning Mr. Rush:

It was an absolute pleasure being in your Monday session last week in Emmitsburg. I honestly believe you set the bar for us for the entire conference. Because of your session, we were able to connect and actually spend time with each other throughout the week. I even ran into Larry and he didn't call me Patty. I would recommend that your session be offered again and at every Higher Ed symposium because it enables the participants to make connections.

That said, please forward your slide presentation to me at this email. I will use it to prepare my report for my supervisor and hopefully be able to share what I learned with my student workers.

Thank you so much,
 Patricia or Pat but definitely not Patty

Patricia D. Jones, MPA
 Office Manager
 Office of Emergency Management
 Tennessee State University
 3500 John A. Merritt Boulevard
 116 Hankal Hall
 Nashville, Tennessee 37209



Excellence
 is our Habit!

 FEMA Workshop



Monroe J Molesky <molesky2mj@alma.edu>
 jrush@justcommunity.com
 Tuesday, June 18, 2019 at 3:37 PM
[Show Details](#)

Hello Lee,

I just want to reach out to you to say how much I enjoyed your Community Engagement workshop at the FEMA Higher Education Symposium. For myself not being an expert in emergency management, I felt it was well tailored to a wide audience. I enjoy experiences and workshops like your's that encourage individual engagement and networking not just lecture. The practical examples and earning about what restorative justice was through the bridge example was enlightening. Some of the people I met during the workshop, I continued to talk to throughout the conference and are now close friends. So Thank You again!

As a side note, I would appreciate if you could send me your powerpoint and the group photo we took at the end.

Most Sincerely,

Monroe Molesky

INTEGRATING THE NEXT GENERATION CORE CURRICULUM INTO YOUR ASSESSMENT AND ACCREDITATION STRATEGY

Caroline S. Hackerott, Ph.D.; Arkansas Tech University

Jamie E. Earls, Ph.D.; Arkansas Tech University

Sandy M. Smith, RN, Ph.D.; Arkansas Tech University

This session sought:

To guide participants through the

- Interpretation and application of the NGCC to their own curriculum.
- Creation of NGCC-based learning objectives and curriculum map in support of accreditation and/or assessment needs.

Description of Presentation:

The presenters reviewed the implementation process used at Arkansas Tech University (ATU). The ATU Department of Emergency Management successfully integrated the NGCC into its assessment and accreditation strategy for both its undergraduate and graduate programs. Both programs underwent accreditation review this spring and use the NGCC as a component of their continual assessment plan.

Presenters explained the philosophy and importance of continuous assessment in the ATU program as a tool for faculty collaboration as well as meeting assessment/accreditation requirements. Participants utilized their own course/program to simulate the process. While ATU used the NGCC as its program objectives, participants were invited to develop unique program objectives if desired.

Through a workshop activity, participants developed a curriculum map for their program using a prepared worksheet. This map reflected how program objectives were introduced, re-enforced, and mastered vertically and horizontally through the curriculum. Course articulation is critical in meeting a program's stated objectives. This process allows individual faculty members to identify the role of each of their courses in the overall program.

Once participants identified their program objectives and created their curriculum map, they selected a single course to develop further. Participants then developed course-level learning outcomes linked to the program objective(s) their selected course was intended to meet. Presenters guided participants through the development of measurable, level-appropriate course-level learning outcomes. Participants also developed learning activities and assessment measures and standards for each learning outcome.

Throughout and following each workshop activity, participants exchanged ideas and challenges amongst the group. Specific questions involving the development of an assessment strategy as well as the overall accreditation process are listed on the following page.

Number of Participants: 25

Questions:

- Can this translate to any academic level of learning (Bachelor's, Master's, Ph.D.)?
- Did you get push-back from the faculty wanting to teach their own material? If so, how did you manage their concerns and/or reluctance?
- How did you suggest a college with fewer faculty accomplish this process?
- Can we get a template to further understand how to integrate NGCC into our programs?

Noted Outcomes:

Participants examined the overall assessment process both philosophically and practically. Participants were introduced to the NGCC as a tool to develop program objectives. The relationship between program objectives and curriculum was explored in the context of the NGCC. Participants practiced creating measurable and level-appropriate learning outcomes designed to support an identified program objective for at least one course. Participants developed assessment strategies for at least one course. This assessment strategy included the identification of appropriate learning activities and assessment standards for at least one course.

SoTL: TEACHING AND RESEARCH DON'T HAVE TO BE SEPARATE

Caroline S. Hackerott, Ph.D.; Arkansas Tech University

Claire Connolly Knox, Ph.D.; University of Central Florida

Shirley Feldmann-Jensen, R.N., DPPD, MPH; California State University-Long Beach

This session sought to help attendees:

- Develop a research question appropriate for study
- Identify appropriate methodological approaches to answer their research question
- Create a strategy for data collection and analysis
- Create a strategy for writing a research article and disseminating findings

Description of Presentation:

Presenters opened the session with an overview of the Scholarship of Teaching and Learning (SoTL) in EMHS. Assessment and SoTL differ in design and information provided. Assessment may provide information or data for SoTL but is not SoTL by itself as it simply examines attainment of learning outcomes. SoTL explores an empirically founded research question designed to study pedagogical/andragogical approaches, learning processes, and other educational processes.

Currently, such research is available through the disciplinary journals of other disciplines including public administration, education, social work, and nursing. This type of empirical study is necessary to move the EMHS disciplines forward. In order to move the discipline(s) beyond anecdotal description of classroom success, examination of the academic process which adheres to the research standards set by the FEMA Higher Education Research Standard Focus Group (HERSFG, 2015) is needed.

Research questions may examine multiple aspects of the educational process. These topics might include curriculum design and articulation, EMHS faculty preparation, learning environment development, instructional design, and the student learning process. For many SoTL researchers, their initial research question is an outgrowth of the assessment process. An appropriate research question tests a hypothesis or problem statement.

The research question determines the project's methodology. Quantitative methods are used to test a hypothesis statistically. This approach typically involves a survey or the analysis of an existing database. Quantitative research strives to provide generalizable results. Qualitative methodology provides a more specific but deeper picture of a process. Qualitative research may provide the foundation for later quantitative study and vice versa. Quantitative methods test a hypothesis, can be experimental or quasi-experimental design, or can include survey, secondary, and observation data. Meanwhile, qualitative methods want to tell the story, go into depth, create

a foundation for later quantitative research. This method can include participant observation, interview, and content analysis.

The collection and analysis of SoTL data and information must follow the research standards as established by the 2015 FEMA HERSFG. Each educational institution applies different Institutional Review Board (IRB) processes. In general, SoTL research must meet ethical research standards. If a study involves human subjects, this process ensures that participants are not being subjected to undue risk. Even if the research project involves secondary data or information, the IRB process should be followed to ensure institutional awareness and support.

The workshop featured multiple engagement activities during which participants, including individuals who attended the AERA meeting through FEMA sponsorship, worked collaboratively to create their own potential research project.

Number of Participants: 30

Questions:

This was a workshop involving the development of a personal research study. Questions were primarily individually focused.

- How do I know if my research question is testable or appropriate?
- How do I collect my data as I teach my class? How much data do I need?
- Where is this research likely to be published?

Noted Outcomes:

The workshop focused on the Scholarship of Teaching and Learning in Emergency Management. The audience was mainly composed of students and professors. The session participants worked in teams of three to five people. The presenters were actively interacting with the participants during both parts: the presentation and the workshop. The goal of the workshop was that each of the participants leaves the session with at least one potential research question to study.

Dr. Caroline Hackerott introduced the topic of Scholarship of Teaching and Learning (SoTL). She explained that it is different than an assessment. Assessment is making sure that what professors have been teaching is what the students are learning. The SoTL can be built based on the assessment. SoTL is linking objectives to the course work, and it answers a research question or hypothesis. The Scholarship of Teaching and Learning takes it much broader, outside of the classroom environment unless you are a quantitative researcher. SoTL requires a research question or problem statement. This means that a literature review must be done to deepen knowledge. It is essential to ask what you would like to know, and the research question should be focused and answerable. Dr. Claire Connolly Knox mentioned that when they first joined, they were interested to know where they were in terms of what and how they teach. They found that none of them were studying pedagogy, which is more teacher and student interaction. They recently published an article in the *Journal of Emergency Management* where they argued that doing more SoTL research can advance the discipline. It can be one way to accomplish that goal.

Dr. Shirley Feldmann-Jensen commented that Emergency Management and Homeland Security before was very descriptive. Now, this is being done to improve what we do. Dr. Hackerott said that in their field, they do creative course designs, instructional designs, and a lot of exchange, which is wonderful. SoTL is what you can turn to and say: this is why innovation works. If you do not have an answer, you must find it.

Engagement Activity:

Participants were divided into groups of five. A white paper board was provided to share ideas within the groups, and every participant had a research question development worksheet. The first step was to individually brainstorm three to four research questions that the participant could recall from previous experiences (5 minutes). Then those questions were shared among the members of the group.

On the back of the research paper, the second step was to develop a concept map with subtopics based on a general topic or area of interest. Under each subtopic, the third step was to list what do we think we know about that subtopic. The fourth step was that for each of the subtopics in which the participant was most interested, he/she wrote a problem statement or hypothesis. After doing that, participants had to formalize a research question and then see the relationship between what they wanted to examine to answer the draft research question.

Dr. Hackerott explained to the audience the next step. The team will become a coach to help consider other things. Also, the team needed to look at the context. How do we see the development of the research question and what do we want to achieve with the research question? Is it exploring, identifying, determining? And then write a general statement of nature, qualitative or quantitative? Dr. Hackerott emphasized that this is an important topic, and it is their goal to make it as accessible as possible.

Literature Review:

The literature review becomes the step after developing the research question. There is abundant literature on every topic. Dr. Knox briefly explained that pedagogy is a more teacher-centered approach, while andragogy is a more student-centered approach. Linking the research question to the pedagogy and andragogy literature is an overlooked step, but an important one. She mentioned that something we should never do is to say, “this has never been studied before.” It is important to go to the literature and look beyond the limited SoTL articles published in the EMHS discipline. There is a rich SoTL literature in related disciplines, including Business, Education, Urban Planning, Communication, Criminal Justice, Leadership and Policy Studies, Management, Political Science, Public Health, and Sociology. She explained that we do not necessarily have to reinvent the wheel. We can look at what has been published and see what they did and how it could be applied to your field of study.

SoTL case study articles in emergency management and homeland security are located in different journals, including the *Journal of Emergency Management*, *Journal of Public Affairs Education*, *Disaster Prevention and Management*, and *Journal of Homeland Security Education*. It should be noted that the *Journal of Homeland Security Education* has been renamed as the *International Journal of Preparedness, Resilience and Security Education*. She also provided

information on helpful resources such as online tools for doing a literature review:
www.fctl.ucf.edu/ResearchAndScholarship/SoTL/journals/#listdb

Dr. Knox asked the participants to develop some key words to use in a literature review based on their topic of interest and then to share it with the group. She explained that it is important to make sure the keywords have some component of what we are studying. The last step is to communicate participant findings, which can be done by presentations as well as publications.

As a result of the guided discussions and engagement activities, participants departed the workshop with at least one potential research project outline. Individuals who attended the AERA annual meeting through FEMA HiEd sponsorship assisted participants and developed their own potential projects. Initial feedback indicated a desire for the development of an introductory-level research workshop in addition to a workshop for those who want an advanced collaborative project development workshop.

In the Senior Writing Project, the student uses an existing project from the work environment or creates a project as part of his/her work and evaluation by a supervisor. The student's academic advisor or the program administrator approves a student's request to use this model vs. a traditional internship. The model identifies an effective field placement evaluation rubric for nontraditional student internships. The model includes recruiting intern partner agencies and providing interdisciplinary opportunities for students. Program administrators must be cognizant of special needs of distance students engaging in an internship and consider organizational constraints such as course scheduling, cluster sites and remote campus centers, flexibility of internship structure, student access to career and support services, accreditation, and quality control.

Additional Questions:

- What data points would support internships in blended homeland security and emergency management programs?
- What are the challenges of deploying internships for nontraditional college students?
- What subject areas in emergency management and homeland security are relevant to student internships?
- What program staffing or other resources are needed to support an internship option for students?
- Selection procedures for interested students? What factors may influence successful internships for nontraditional students?

- Articulation of a methodology for developing internship options for nontraditional students in a blended undergraduate homeland security and emergency management program.
- Development of a process for engaging public and private sector employers to collaborate with academic program administrators in providing internship options for nontraditional students.

WHAT TO TEACH IN EMERGENCY MANAGEMENT?

David A. McEntire, Ph.D.; Utah Valley University

This session sought to:

- Introduce new faculty to the important and dynamic literature in emergency management so they will be better instructors.

Description of Presentation:

Many universities are starting emergency management programs, which is wonderful. But, because some faculty are new to the discipline and profession, they do not yet have the appropriate background (e.g., education and practical experience). Therefore, this workshop is important to help faculty gain foundational knowledge about this vital disciplinary area.

Prior to the symposium, I spent time reviewing the literature and I updated the slides with several new books relating to social media, technology, and global warming/climate change. I also provided several slides which cover the different paradigms in emergency management. The slide deck continues to expand each year with more than 175 slides of valuable concepts, examples, and resources.

During the 4-hour presentation/discussion, several topics were covered including:

- Definitions of emergency management
- The phases of disasters/emergency management
- The mission, vision, and principles of emergency management
- The concepts of hazards, risk, vulnerability, and disaster
- Historical views of disasters (how they have changed over time)
- The history of emergency management
- The challenges facing emergency management, including Wayne Blanchard's Dirty Baker's Dozen
- Resources available from the FEMA Higher Education Program, the Natural Hazards Center, etc.
- Journals in and related to the discipline
- Foundational books on disasters and emergency management
- Diverse schools of thought (e.g., natural hazards, radical/critical, administrative, social vulnerability, homeland security, etc.)
- Topical or functional studies including aspects of disasters (e.g., mitigation, insurance, planning, emergency planning committees, training, exercises, warning, evacuation, sheltering, triage, mass fatality management, debris management, social media, ICS, EOC, etc.)

- Disaster paradigms (e.g., natural hazards, civil defense, technological hazards, comprehensive emergency management, disaster resistance, disaster resilience, sustainable hazards mitigation, homeland security, whole community, comprehensive vulnerability management, etc.)
- A case study of the response to the Ebola outbreak in Dallas, Texas
- A discussion of planning, improvisation, and spontaneous planning

Number of Participants: 50

Noted Outcomes:

Everyone was educated further about disasters and emergency management and will be better instructors because of this experience.

CAREER PATHWAY SUCCESS: IT STARTS ON DAY ONE

Dr. Carol Cwiak, North Dakota State University

Dr. Sarah Kirkpatrick, North Dakota State University

This session sought to:

- Address the reason all these elements (education, professional development, networking, career planning, and experience) are important to identifying and succeeding in a career pathway;
- Explore ways in which these elements co-exist in program framing;
- Illustrate what these elements look like in practice in an undergraduate program (without extra money or personnel); and
- Provide fast track tips so participants can implement ideas next semester.

This presentation started with the query, “What does an ideal graduate entering the job market look like?” After a brief discussion of participants’ responses, the presentation posed a question about how much of the hallmarks of an ideal graduate educational programs can control and how much they can facilitate. The presentation examined what is being done at NDSU to advance career pathway success.

Under the things that can be controlled, the items discussed were program-level learning objectives (a threshold concepts handout was provided in conjunction with this discussion), curriculum in the major, internship requirements and placements (a job placement handout was provided in conjunction with this discussion), and assessment of learning objectives and internships. Under the things that can be facilitated, the items discussed were expectation management, professional development course, department-level advisors, major map (a major map handout was provided in conjunction with this discussion), agreements with partners, cross-class and community engagement; conference support, and alumni engagement. Between the items that can be controlled and facilitated, NDSU’s program has worked to create career pathway success for its graduates starting when they first enter the program as new students.

Participants were asked to talk in small groups about the types of things they were doing in their programs and the extent to which any of the items discussed would add value. Participants were provided a blank major map to help them conceptualize the types of coursework, experience, training, network development, and career launch preparation that would help their students achieve career pathway success. Highlights of each small group discussion were shared with all the participants.

The presentation wrapped up with a summary of the importance of career pathway success for emergency management graduates and for their educational programs. In addition, the critical importance of graduates’ career pathway success to the emergency management practitioner community and the organizations and communities they serve was emphasized. Participants were encouraged to continue the dialogue at their home institutions and within the larger

emergency management higher education community.

Questions:

- internships
- external relationship management
- the major map
- the role of accreditation

Noted Outcomes:

Participants took away several handouts, information from the presenters, and information from each other. The most notable outcome was the discussion around small, focused efforts that can deliver big results for graduates' career pathway success.

COMPREHENSIVE ACADEMIC PROGRAM REVIEW: HOMELAND SECURITY AND EMERGENCY MANAGEMENT DEGREES

Kenneth Christopher, DPA, CPP, National University

This session sought to answer the following question: “How resilient is your organization?”

When exploring ways to build better emergency preparedness, it is important to work toward enhanced organizational resilience. The session provided valuable information on how organizations can begin to measure their own organizational resilience score/posture. Organizational resilience strengths and weaknesses are identified allowing to make a business case for additional investment in resilience and ultimately emergency preparedness.

During the session, participants explored the underlying factors or indicators which contribute to organizational resilience. Participants were exposed to the rich research history on the subject of organizational resilience, which is global in scope. Participants were introduced to a survey instrument which has been developed and updated to capture organizational resilience data. Participants learned about an opportunity to take part in a large research study on organizational resilience. Participants learned how they could uncover organizational resilience data for their organization(s).

Participants took part in an informal and fun exercise during the presentation/workshop.

Noted Outcomes:

Participants left the session with:

- a new understanding of the indicators that contribute to organizational resilience;
- access to a survey instrument to facilitate the capturing of organizational resilience data; and
- an opportunity to either be a part of a large organizational research study or an opportunity to explore their own organization’s resilience posture/score.

The session was a success as participants were fully engaged and worked within small teams, each helping to define the newly discovered organizational resilience indicators.

I sincerely hope to present again at the FEMA Higher Education, on this subject, in the future.

JOB PLACEMENT OF RECENT EMERGENCY MANAGEMENT GRADUATES

Sarah Jo Bundy Kirkpatrick, Ph.D.; North Dakota State University

Jessica Jensen, Ph.D.; North Dakota State University

This session sought to:

- Describe/critique the methods used in collecting data related to job placement.
- Detail the findings of a study related to overall job placement and the factors examined related to job placement.
- Consider the implications of this study for future data research in this area of job placement, as well as for emergency management higher education.
- Encourage participants to think about how they might be a part of future research efforts by refining what and how the data is collected.

Description of Presentation:

What types of jobs are your students getting? This is the question that was posed to participants at the start of the session. In grappling with this question, participants were encouraged to think deeper about whether students are getting the jobs they want and in keeping with their degree. As participants expressed their experiences in an open discussion, it was clear that there was a wide variety of answers. However, most noted that there was a mixture of graduates wanting and getting jobs in the field and others working in career fields outside of emergency management/homeland security. All agreed though that job placement was a topic of interest to both themselves and their students.

This discussion established the importance of the topic of job placement while also highlighting how our knowledge about it was based on anecdotal observations. Put another way, while a topic of intense interest and discussion, job placement was not one that had actually been empirically studied. The presenters noted that this dearth of information on the topic led them to two research questions around which the remainder of the presentation centered:

- 1) To what extent are recent emergency management graduates getting jobs they intend?
- 2) What predicts when emergency managers get emergency management jobs?

The presenters sought to survey recent graduates in an initial attempt to answer these questions. The survey asked a variety of questions about the sector and category where students had hoped to work when they graduate and where they actually worked, as well as questions related to their background characteristics, job search approach, degree program, network, professional development, and education experience. The presenters' intent had been to do a census of those graduating from an undergraduate emergency management program during the academic years 2015–16 and 2017–2018. However, due to the fact that most institutions are not tracking their graduates and/or do not maintain good contact information for their graduates, completing a census was not possible. Instead, a multi-pronged approach using email, social media, and peer

relationships was used to solicit participation. This strategy yielded 161 responses to the survey. The data was collected from October through December in 2018.

The presenters noted a number of limitations of the study and emphasized that the results are exploratory. The primary limitation of the study is that findings from it are not generalizable. There was also the potential for non-response bias. Overrepresentation from the presenters' institution was noted as a limitation as well.

The following key findings were shared:

- The mean age of graduates was more than 30 years old and the majority had at least 7 years of work experience, suggesting that graduates are diverse in terms of background and experience.
- The majority of participants are getting jobs in the job category and sector that they wanted. However, for those still searching for a job on graduation day, there was more variation in terms of sector of employment.
- Not all, or even most, graduates of emergency management bachelor's degree programs who participated in this study, intended, or are employed in, an emergency management job. Only 82 of the 161 even wanted an emergency management job post-graduation and such jobs are held by 62 respondents.
- While the majority of participants intended a job within the government sector at some level, a quarter were seeking employment in the business sector. Few graduates were interested in working in the non-profit or quasi-governmental sector.
- Graduates who desired emergency management jobs struggled to find jobs consistent with that intent more so than those who wanted emergency management-relevant or non-emergency management jobs.

It was this last finding that really interested the presenters and spurred the second research question noted above. The presenters provided a theoretical framework around job placement/employability that they developed from a combination of informal discussions around these topics within emergency management and formal scholarship around these topics from other disciplines, as well as the hypotheses around job placement that they had hoped to test through statistical analysis. Unfortunately, because of the small sample size and lack of variation, regression analysis could not be done to really delve into the factors that might predict job placement for those wanting an emergency management job.

The presenters asked the participants to engage with the following questions:

- What types of jobs are your students getting?
- Do these findings surprise you?
- What are some implications of these findings or what questions do they bring up for you, should they hold true in future research?
- Based on this exploratory research, what future research do you see as important on this topic?
- Do you see any notable categories missing from the theoretical framework based on your own experiences?

Noted Outcomes:

Participants agreed that a line of research around this topic was a worthwhile pursuit. It was suggested that future research should consider things such as:

- A repeat of the current study with additional participants to allow for statistical testing
- A longitudinal study of graduates
- The placement of graduates from other types of programs, e.g., associate degree, master's degree, homeland security program
- Why students pursue emergency management degrees when not intending to pursue an emergency management job and the benefit (or not) of the degree
- The perspective of employers as it related to what makes graduates employable

In addition to sharing the findings of this exploratory research and considering future research, the session identified important challenges around moving this line of research forward including:

- Lack of alumni tracking—both in terms of jobs and contact information
- Lack of consensus around what even constitutes an emergency management job
- Lack of consensus around what should be a part of an emergency management curriculum

While there was not time in the session to delve into solutions for the identified challenges, participants were asked to consider how they might be solved and to continue to engage in dialogue around the same. Participants were also encouraged to, if interested, use the theoretical framework presented in the session to guide any future research on the topics of job placement and employability so that the discipline can build a knowledge base around these topics.

HOMELAND SECURITY ENTERPRISE'S DUTY TO PREPARE FOR CLIMATE CHANGE

John Comiskey, Ph.D.; Monmouth University

Michael Larranaga, Ph.D.; Insight Risks

This session sought to:

- Identify climate change risks to homeland security.
- Identify implications of climate risks to homeland security mission set.
- Promote Climate Security as the sixth mission of the homeland security enterprise.

Description of Presentation:

Climate change is a viable threat to U.S. homeland security and is likely the most significant risk facing humanity. A consensus of the scientific community concludes that climate change is occurring, is relatively irreversible, and aggressive mitigation of climate change drivers is necessary. Climate change impacts include surface air temperature rise; sea level rise; potable water scarcity; drought; heat waves; fires; changes in precipitation patterns; disastrous changes in natural land cover and ocean chemistry; and an increase of the frequency and intensity of extreme weather events. We argue that the Nation is ill-prepared for risks presented by climate change and that we have a duty to prepare for and securitize climate change a priori rather than posteriori, as is typically the case for focusing events such as the Nation's reactive response to the 9/11 terrorist attacks. Acting to prevent and mitigate future global warming now will result in lower societal costs and other benefits such as improvements in quality of life in the near term while providing for the prosperity of future generations and the preservation of America's legacy as a leader among nations in the long term. To achieve climate security, we must identify, acquire, and sustain the capabilities required across the whole-of-community to prevent, protect against, mitigate, respond to, and recover from climate change risks.

Questions:

- What are the climate change risks to homeland security?
- How might the homeland security enterprise and society prevent climate security?
- How might the homeland security enterprise and society mitigate and adapt to climate change?

Recommendations: The Nation, including every department and agency at all levels of government, the private sector, non-governmental organizations, and the American people, has a duty to prepare for climate change risks. To achieve climate security, we must identify, acquire, and sustain the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from climate change risks. To that end, we make the following recommendation for the Nation and the enterprise:

1. Develop and implement environmental policies and technologies that balance human security, energy, economic, and political realities. The policies and use of these technologies must reduce carbon emissions to sustain the Earth's capacity to support life, while at the same time reduce carbon emissions.
 - Confront and address the political climate change policy deadlock at all levels of government and the private sector.
 - Prioritize climate change risk communication among all stakeholders.
 - Aggressively implement clean energy technologies and related policies that reduce GHG emissions that contribute to global warming.
 - Develop and implement energy portfolios that leverage all available energy sources in the most environmentally sustainable manner.
 - Secure bipartisan and politically sustainable pathways in which key stakeholders, above all the American people, can claim an important victory.
2. Add prevention and mitigation of systemic climate change risks as the enterprise's sixth mission.
 - Conduct a comprehensive national climate change vulnerability assessment to identify climate change risks to the Nation and the enterprise.
 - Revise the NPG to align with climate change risk, hazards, mitigation, and resilience strategies.
 - Integrate near-, mid-, and long-term climate forecasts into the NPG.
 - Emphasize climate change mitigation initiatives and the core capabilities necessary to mitigate climate change impacts.
 - Include the IPCC's four RCPs in the NPG risk calculus.
 - Include the risk-calculus in the Threat and Hazard Identification and Risk Assessment (THIRA), individual state preparedness reports, Stakeholder Preparedness Review Guide, Strategic National Risk Assessment, the revised DHS's Climate Change Action Plan and U.S. Coast Guard Arctic Strategy, and other documents deemed appropriate.
 - Revise the NPG to align with climate change risk, hazards, and mitigation strategies.
 - Revise the National Infrastructure Protection Plan and each of the sector-specific plans based upon the National Climate Vulnerability Assessment.
 - Assess the Coast Guard for likely personnel shortfalls as well as the surge capability of the emergency services sector and the DHS Surge Capacity Force.
 - Feature realistic climate change-induced maximum of maximum catastrophes in FEMA's National Exercise Program.
3. Adapt a whole-of-community approach that recognizes the dynamic interplay among homeland security, hometown security, and resilience.
 - Implement a whole-of-government approach to climate change that fully recognizes the dynamic interplay among homeland security, hometown security, and resilience.
 - Integrate Federal guidance and initiatives with local and private sector programs that are inclusive of the Nation's 35,000-plus municipalities, towns, townships, and tribal interests.

- Identify the roles and expectations of each member of the enterprise, including every citizen, in preventing, mitigating, and preparing for the risks associated with climate change. Revise the National Strategy to Combat Terrorism (2018) to include criminal and violent extremist exploitation of the impacts of climate change.
- Identify and assess vulnerabilities and exploitation opportunities created by climate-related human displacement and forced migration.
- Identify and address criminal and violent extremist organizations that may leverage climate change impacts to facilitate criminal and terrorist activities.
- Include climate change impacts in international aid packages and countering violent extremism programs.

TEACHING TENURE AND DISSERTATIONS: HOW CAN I POSSIBLY ACCOMPLISH EVERYTHING?

Shawn Bayouth, Ph.D.; Arkansas State University

Amy Hyman, Ph.D.; Arkansas State University

Joseph Richmond, Ph.D.; Arkansas State University

This session sought to help participants:

- Better understand the challenges experienced by faculty balancing being a Ph.D. student, while maintaining full-time employment.
- Come away with several successful coping methods of time management and stress reduction.
- As supervisors, know what steps to take to simplify the workload of faculty.

Description of Presentation:

This panel will feature a question-and-answer format to examine the challenges experienced by faculty when balancing the rigors of being a Ph.D. student with maintaining full-time employment. It is often difficult and problematic to find and attract emergency management professionals with a doctoral degree to academic faculty positions. Thus, Universities often hire their new faculty with only a Master's, contingent on the completion of their Ph.D. This creates a situation where new faculty are required to simultaneously learn the nuances of a new position, balance full teaching loads, attend a university doctoral program, and quite possibly begin the tenure process as well. Understandably, new faculty can often feel overwhelmed, highly stressed, and overall performance can be negatively impacted at one of the most critical periods in a faculty's career. The goal of this panel discussion is to afford an opportunity to discuss the pros and cons of this rigorous track for faculty, and to examine methods used in maintaining an overall acceptable faculty workload.

This panel will feature two full-time faculty that teach between 12 and 15 credit hours each semester, are both tenure-track, and are each enrolled in Ph.D. programs. Assistant Professor Amy Hyman is in her second year of the tenure process at Arkansas State University and is a first-year student in Jacksonville (AL) State University's Emergency Management Program. Assistant Professor Joseph Richmond is in his third year of the tenure process at Arkansas State University and hopes to complete his dissertation and graduate from Northeastern (MA) University in the summer of 2019. Shawn Bayouth, Chair of the Disaster Preparedness and Emergency Management Department at Arkansas State University, will serve as both the moderator for the panel discussion and a panelist. While completing his Ph.D. at Iowa State University, he worked full time as a Deputy Fire Chief, and taught adjunct for Colorado State University. Shawn can also add to this discussion from a supervisor's perspective, sympathetic to the challenges and demands placed upon two of his full-time, tenure-track faculty that are both Ph.D. students and maintain full-time teaching loads each semester. He will share his helpful (and even not-so-helpful) experiences in assisting faculty to be successful in the demanding world of academia.

Lastly, just being a full-time student alone while completing a Ph.D., even under normal situations, can be quite arduous. When combined with the burdens and anxieties of a full-time job, it can interfere with a happy home life too. These panelists will scrutinize and deliberate over the activities that some have used to help retain a balance that works for their situation. It is hoped that all in attendance will walk away with some helpful tips and tricks to being successful in preserving a work-life balance.

Number of Participants: 9

Questions:

- How did you choose your dissertation topic?
- Do you get a reduced teaching load for time spent on dissertation?
- What is the time period requirement for your dissertation?

Noted Outcomes:

- Ensure your dissertation is something you are passionate about and you love it. The process is tough, and the passion makes a huge difference; and at the same time, it is the means to an end. Your topic could be university dependent; therefore, you can pick a topic that your professor is passionate about, so they can help you. Alternatively, find a professor that is as passionate about a topic as you are. Consider a cohort model and the benefits of having the support of your classmates.
- You are responsible for service to your college, university, and community + scholarship and teaching; therefore, the more committees you can be on, the better (university level).
- Have support from people around you and let them know what the expectations are from the very beginning.
- Be mindful, empathetic, listen, understanding, non-judgmental, take things off their plate, ask before you give additional work, prioritize tasks, remind your boss how busy he/she is, celebrate the milestones, try to get financial help, and look for ideas for research grants.
- Find a mentor, someone you can go to with questions, someone you can go to and complain, and then an outlet to deal with your stress.
- Work out and consider Yoga; find time and ways to clear your mind. In addition, make a mental list of what you did to combat the feeling of not accomplishing things, or the “never-ending to-do list.” Also, make to-do lists to break down the pieces of workload to be more manageable.
- You do not have to give up everything to obtain your goals.
- Exercise will help you cope and release.
- You need something to help constructively deal with your stress.

ANALYSIS OF BUYOUT PROPERTIES – ARE THE HEADLINES CORRECT?

Eric Best, Ph.D.; University of Delaware

This session sought to:

- Summarize and clarify National Public Radio Article Series about the FEMA NFIP Program.
- Provide a roadmap to actually answering questions posed by NPR.
- Encourage data sharing between FEMA and academics to improve policy analysis.

Description of Presentation:

On March 9th, 2019, National Public Radio released a series of reports and articles along with a dataset of NFIP buyout properties obtained from FEMA through a FOIA request. This data was marketed as, “The Thousands of Disaster Buyouts FEMA Didn’t Want You to See.” NPR used a cursory set of methods to bin the buyout data by ZIP code, and then conclude that the NFIP buyout program was biased by race and class because demographics in buyout ZIP codes did not match the demographics for the United States as a whole.

NPR’s conclusion was quickly distilled into outrage about FEMA racism, and claims about FEMA misbehavior in the NFIP spread quickly across social media platforms, which seemingly no one stopped to check the methodology used to create the conclusion.

This presentation examined the underlying data used by NPR and the instant acceptance of sharing of NPR conclusions across social media. Analysis of the dataset made public by NPR showed that it was not possible to reasonably draw conclusions about racism from the data included in the program. Limitations of the data set, and NPR’s methodology were discussed using an example from Delaware where a neighborhood experienced 172 buyouts in 2004. The NPR dataset included only 17 (10%) of these buyouts, and demographics for the ZIP code in question were significantly different from the buyout neighborhood.

The presentation discussed spatial regression analyses conducted using the provided dataset and found no way to quantitatively support a claim of racism in the NFIP using this data. However, there was a significant negative relationship between buyout frequency and time periods when spatially relevant Case-Shiller home price indices were low, and a significant negative relationship between buyout frequency per total number of homes and average area home price.

Number of Participants: 12

Questions:

- What can be done to definitively answer if the NFIP buyout program has issues with racism?
- How can FEMA involve academic researchers in this process?
- Why did FEMA remain silent after the NPR series?

Noted Outcomes:

The first outcome of the presentation was a call for better data about buyouts, which has since happened with two new data series on OpenFEMA, including NFIP policy and claim data. This is a major development for FEMA and academic researchers, and it will allow us to begin to answer some of the policy questions about NFIP confidently.

In addition to showing that the methods used in this case were not robust, this presentation serves as a reminder to check the underlying data and analysis of a study before sharing it and lending your own credibility to it. These articles and their conclusions spread rapidly through academia when a quick look at the dataset and methodology would have shown these results would not pass peer review.

Another outcome of the presentation is an example of what academic researchers can do to assist government agencies in evaluating policy. In this case, no matter the result of an inquiry, answering questions such as “does a program have issues with race or class bias?” will be helpful.

ARE HIGHER EDUCATION PROGRAMS INCORPORATING FEMA'S NEXT GENERATION CORE COMPETENCIES?

Dr. Jason Cohen, Ed.D.; Nova Southeastern University—College of Osteopathic Medicine

This session sought to:

- Understand the current level of awareness and incorporation of FEMA's Next Generation Key Core Competencies in higher education.
- Distinguish the comfort level of faculty members in the field of disaster and emergency management as it relates to the core competencies.
- Describe the value of instilling the core competencies into higher education curriculum.
- Describe the need for field-specific accreditation and how the core competencies can play an integral part of that process.

Description of Presentation:

Dr. Cohen presented his dissertation study findings on the familiarity and level of incorporation of FEMA's Next Generation Key Core Competencies to a highly diverse and interprofessional group of academics and practitioners representing the field of disaster and emergency management.

The presentation consisted of the following problem statements, including, but not limited to: lack of understanding of who will dictate the curriculum for higher education in the field of disaster and emergency management, practitioners and higher education faculty working together to figure out what the key core competencies students in higher education should receive regarding formal education, and the field of emergency management currently not having an accrediting body.

It also included the need for the study. Currently, there is no literature or research to determine if the key core competencies have been integrated into higher education emergency management program curricula.

The study included a quantitative survey with 15 questions. It was sent to 140 faculty members teaching in the field of emergency management. 101 of 140 faculty members responded (72% response rate). Some of the key results were as follows: 34.7% of respondents were not familiar with or not sure if they were familiar with the competencies, 72.3% of faculty members are not required to incorporate any of the core competencies, the competencies with the most comfort level to instill into instruction were operated within the emergency management framework, principles, and body of knowledge, sociocultural literacy, and leadership. 75.7% agree or strongly agree that the core competencies will improve learning outcomes, 77.3% agree or strongly agree that the core competencies will enhance continuous improvement, and 68.1% agree or strongly agree that the core competencies will translate into real-world practice in the field. Lastly, 69.3% agreed or strongly agreed that accreditation would improve quality of curriculum in higher education.

Number of Participants: Approximately 35

Questions:

There were many participant questions and discussion throughout this session. Some examples are below.

- Discussion of how we can bridge emergency management and homeland security instruction as it relates to the core competencies.
- Should higher education programs consider adding a recognized EM licensure/certification exit exam for graduating students?
- Participants questioned who, when, and what would adopt the responsibility of regarding such implementation of accreditation specific to emergency management programs.

Noted Outcomes:

There were several noted outcomes from this presentation. It was inherent that institutions of higher learning need to incorporate FEMA's Next Generation Core Competencies into future curriculum and that a standardized system was agreed, by all, to benefit the greater good of the emergency management field. There was a need to provide training and development to institutions of higher education and those who teach in the EM-specific programs of why the majority of faculty members feel more comfortable with certain competencies over others. In addition, more outreach needs to take place to those teaching in the field but not familiar with the core competencies.

The field of higher education has created a gap through some inconsistencies such as not requiring the core competencies to be incorporated into degree programs. There are several other studies that could be researched to help move the core competency initiative forward such as the following: a study focusing on if the core competencies are actually enhancing continuous improvement in programs, a study to help determine why those who manage degree programs in EM are reluctant to enforce the integration of core competencies, and a study to figure out the barriers and challenges of why EM-specific accreditation for the field has not happened.

INCREASING RESILIENCY IN THE HEALTHCARE AND PUBLIC HEALTH SECTOR

Rosemary Hartofilis, MPH; St. John's University
Bernard Jones, DSc; St. John's University

This session sought to:

- Address the issue of evaluating appropriate methods of increasing resiliency in hospitals and other healthcare entities in the Healthcare and Public Health Sector of our Nation's critical infrastructure.
- Discuss the utilizing of risk management metrics in this sector, as well as integrating technology and informatics in the sector's practices.
- Present the importance of meeting the resiliency needs for healthcare professionals during both normal operations and public health emergencies.

Description of Presentation:

Increasing Resiliency in the Healthcare and Public Health Sector is a series of free online courses aimed at providing core knowledge and training to medical professionals who play roles in various phases of disasters.

The Healthcare and Public Health sectors operate as interdependent functions. They serve the general American public's healthcare needs but also serve the workforce, ensuring the preservation of a useful and timely response in emergencies as well as routine responses. In response to an Ebola outbreak, healthcare providers are more qualified. Dr. Jones adds the concerns of civilian/business needs should be addressed while adding a practitioner emphasis on response planning. Think of covering all plans spanning from small-scale emergencies to pandemic planning. Other challenges in response from HPH sectors exist in information flow and the identification of the right lead healthcare vs. public health. Examples include reliance on incorrect subject matter experts, i.e., microbiologist on medical staff vs. epidemiologist in the public health sector.

The HPH sector can act as a cascading critical infrastructure and a vital resource. This is a cascading product of the same interdependencies compounded by ineffective cross-communication and failure to examine and align the capabilities. Bak's theory of punctuated equilibrium compares the complexities to a pile of sand in which landslides can occur from a failure in any part of the complex CIKR leads to others failing. Examples include Failure in the transportation sector, leading to mass casualty transportation issues, blocked roads preventing access, disruption in the supply chain.

Issues to address on the healthcare side include:

- Nurse sustainment. Resiliency challenges from burnout and lack of mental health care/concern for the nurse core are foremost. It is imperative to build a culture of resilience and acknowledge personal wellness as a necessary attribute equal to performance.
- Supply chain management. Deficiencies in supply chain lead to “just-in-time” delivery models. This limits diagnostic abilities or initial emergency/surge capacity.
- Inadequate Training. Current training models to include practical exercises and evaluations are sub-standard. Potentially an issue of resource allocation or seen as not value-added. Levels of training vs. level of required training are not carried out to the individual positions within hospitals. This includes active shooter responses of secure, preserve, fight for nurses vs. run, hide, and fight for others. Further, resiliency training tailored to the population is necessary. Creation of a training position which is CPI driven would support a training priority focused on hazard vulnerability assessment results.
- Limited Resources/critical supplies. Weak points in supply-chain exist due to non-availability of resources. Potential solutions include identifying alternative providers and cross-organizational electronic inventory systems.
- Cyber-vulnerabilities. Cyber-breaches not only affect sensitive information but also pose a risk to critical life-saving equipment. This rapidly changing environment requires dedicated personnel to secure infrastructure.

Challenges to CIKR:

- Reduction in nurse workforce—Create a resilient environment, foster the mental health of the nurse core, conduct post-incident discussions, and consider aversion therapy for PTSD.
- Lack of Support Agreements—Create internal and external memorandums of understanding/mutual aid agreements, create redundancy in data applications to ensure access to data in emergencies
- Lack of cyber-security focus—Moves to online records and digital systems did not coincide with hiring of cyber-defense specialists. Vulnerabilities are not addressed until after cyber-incursions.
- Resiliency Engineering—Use assessments to drive data-validated preparedness. Conduct management reviews and use KPIs/KRIs to track the rights and wrongs and share best practices.

Number of Participants: 12

Noted Outcomes:

Participants will become familiar with issues such as decreasing surge capacity, limited resources and critical supplies, inadequate employee training, and other cost-related factors that can severely inhibit this sector’s ability to provide support during both normal operations and mass casualty events. They will discover how decreased resiliency in hospitals and other healthcare entities in the Healthcare and Public Health Sector affect emergency response and

recovery in our Nation's critical infrastructure sectors as a whole. They will also learn how specific continuity theories and frameworks will provide a systematic assessment of research needed to advance our understanding of these gaps in resiliency in this sector and see how an outline of a policy and plan of action can be used to address these problems. In addition to examining the risk management methods inherent to planning for appropriate disaster response and reducing vulnerabilities for healthcare facilities, this presentation will also address the unique considerations to be made for vulnerable populations (e.g., infants and children, pregnant women, patients with disabilities, etc.) included in this critical infrastructure sector.

UNDERSTANDING INTERNATIONAL CULTURAL COMPETENCIES IN DISASTER PLANNING AND RESPONSE

Thomas J. Carey III, Ph.D.; Metropolitan College of New York

Ali M. Gheith, Metropolitan College of New York

This session sought to:

- Identify techniques to improve current delivery practices at the strategic and global levels in providing tomorrow's practitioners and scholars for service in a challenging field.
- Identify various types of emergency management cultures and practices that exist to include the need for cultural competence from a global perspective.
- Identify the lessons learned from the international collaboration based on the experiences of faculty and students from both programs.

Description of Presentation:

This presentation discussed a purposive and convenience sample of emergency and disaster management master's students who completed a study abroad program in Spain during the Spring of 2016. Data was obtained through written reflective papers, interviews, and observations. During the field-based practicum, students were tasked to respond to a series of reflective thinking questions to develop reflective journaling entries. At the end of the field assignment, students culminated these reflections and observations into a reflection paper. The findings of the study suggested that there are vast benefits derived from study abroad programs that can be tailored in meeting the needs of emergency management curricula at the master's level. Benefits of this study abroad program for emergency and disaster management students revealed personal growth, understanding diverse cultures, collaboration among peers of the host nation and practitioner agencies. Several themes became evident as a result of students taking part in a study abroad experience. The coding process revealed the following emergent themes: understanding the importance of cultural awareness, global emergency management cultures, and impacts of collaboration and partnerships.

Number of Participants: 9

Questions:

- Participant Question 1: How did your program prepare the students for the study abroad component?
- Participant Question 2: What were some challenges that your program faced during the trip?
- Participant Question 3: How did your program deal with cancellations of scheduled events during your stay in Spain?

Noted Outcomes:

High-profile disasters and emergencies continue to gain attention in the field of emergency management from a global perspective. Colleges and universities respond to these new demands by educating highly trained professionals for the field of emergency management. There is a lack of research as to what substantial benefits are available to emergency management students taking part in study abroad programs.

Findings revealed that collaboration leads to access for non-traditional learning environments. The literature reflects this trend as practitioners make up the majority of many master's programs. Partnerships between academic institutions enable them to share resources and reduce costs.

Collaborations build networking capacities for students. Properly supervised critical reflective thinking assignments used in study abroad programs are beneficial to a student's learning process. Culture influences emergency management practices.

Implications revealed that at the core of experiential learning is the opportunity to learn in environments where students can apply theory to practice in real-life settings. Proper supervision of critical reflection assignments and follow-up discussions by instructors are key after experiential events take place to achieve the maximum benefits of the learning process. Time management and selection of learning events is key. Findings have the potential to impact the theoretical or conceptual framework under which emergency management programs are designed.

Our recommendations include: administrators should consider partnering with institutions abroad in offering EM education; professors should institute critical reflective practices by instituting goals and objectives prior to departure with students and staff members; after-action reviews

(AARs) should be conducted daily after a learning event concludes; future research is needed in this area. The study abroad component enables institutions that house emergency management programs to educate and orientate future emergency managers to real-world practices from a global perspective. Learning about another culture broadens a student's ability to understand how people of other nations prepare, respond, and recover from disasters. Additionally, there were lessons learned from an international collaboration with the University of Malaga based on the experiences of faculty and students from both programs.

Participants provided feedback that they enjoyed reading the conference paper and wanted to share it with their colleagues. All participants were furnished with a copy of *Short Study Abroad Programs for Emergency and Disaster Management Curricula, Strategies for Implementation: The Spain Experience*.

BUILDING CULTURES OF PREPAREDNESS: TEACHING & LEARNING CULTURE-BASED APPROACHES IN EMERGENCY MANAGEMENT

Laura Olson, Ph.D.; Georgetown University

Eric Stern, Ph.D.; SUNY-Albany

This session sought to:

- Recommend how preparedness initiatives should engage with diverse communities.
- Present materials/concepts for EM programs and classrooms.
- Share culture-based approach based on a Higher Education Program report, *Building Cultures of Preparedness*, written in response to FEMA's Strategic Plan.

Description of Presentation:

The workshop began with a quick review of mainstream approaches to preparedness, many of which have not yet produced desired outcomes at the level of individual households and communities. We shared an alternative, culture-based approach to preparedness and highlighted preparedness initiatives that engage with diverse communities, neighborhoods, organizations, and individuals. Our approach was captured in a recent FEMA Higher Education Program report, called "Building Cultures of Preparedness," which was solicited to provide an academic community response to Strategic Goal #1 in FEMA's Strategic Plan (2018–2022).

Presenters explained how the notion of building a singular, uniform national "Culture of Preparedness" can have only limited success and why a different strategy is needed when striving to achieve our national preparedness goals. To build a culture of preparedness, we must recognize cultural diversity and embrace a transformative shift in our approach to preparedness. The heterogeneous local environments that exist across the United States mean that preparedness will have to be built one community at a time. This requires an approach that encourages local engagement, meets local needs, recognizes local strengths and vulnerabilities, and enhances the capacities already present in communities. A change from the preexisting top-down approach to a bottom-up strategy would engage diverse cultures and contexts to build many individual and distinct Cultures of Preparedness at the local level. Locally specific solutions should be tailored to different cultural contexts by community members that understand their history and surroundings.

To address the 'why does culture matter?' question, presenters shared how every human group and human being is influenced by cultural factors that shape their decisions and viewpoints. Culture is a great influencer of the work we do in the field of disaster management. What is risky, what is safe, what successful disaster preparedness looks and feels like, is shaped by the values and worldviews that people hold. The importance of understanding these worldviews is often neglected when compared with the emphasis that is put on the physical structure of levee

systems, the measurable integrity of buildings, or the economic assets of a community. Yet cultural differences infuse how we design and situate homes, perceive risk, or why we choose to stay rather than evacuate. The idea is that when emergency managers are responsive to cultural context and the values of specific groups of people they are working with, preparedness initiatives are likely to be more successful.

Another topic of discussion was organizational culture. Organizational cultures are often considered to be unique from one another and can have unique implications for safety, preparedness, and dedication to service for the wider community. Organizations may differ in terms of the resources they put into disaster preparedness or their willingness to assist local communities they serve during periods of disaster recovery or mitigation. As a result, organizational culture can both inhibit or facilitate learning from our experience of disasters.

Four guiding principles were presented as the basis for culturally informed preparedness efforts. These are Trust, Inclusion, Cross-Cultural Communication, and Support of Local Practices and Successes. Another method necessary to achieve a bottom-up strategy was discussed: the culture broker. This role was described as an individual(s) that has ‘one foot in their local community and another in the structures of emergency management.’ To best accomplish Goal #1 in FEMA’s Strategic Plan, an approach that is inclusive, builds trust, is culturally aware, and engages in two-way communication will generate better preparedness outcomes.

Number of Participants: 40

Questions:

- Would it make sense to use the term belonging in place of inclusiveness?
- Why is an understanding of culture(s) relevant in every context?
- How can we influence this understanding of Building Cultures of Preparedness inside and outside of the classroom?

Noted Outcomes:

The team addressed Strategic Goal #1 in FEMA’s new Strategic Plan and the report that they produced for the FEMA Higher Education Program, called Building Cultures of Preparedness. They reviewed the innovations in this report, and their genesis and implications for emergency and disaster management concepts in the classroom and the field. Workshop participants learned how disaster anthropologists conceptualize culture and how culture matters in the field of disaster work, including specific examples from different cultural contexts and communities across the United States. Workshop facilitators presented case studies of preparedness efforts that successfully engaged with local cultural groups, households, and community organizations to enhance preparedness. Presenters led two interactive activities that engaged workshop attendees in the identification of specific cultural environments in their own contexts and the identification of culturally appropriate strategies to build preparedness locally. A focus was placed on how to nurture effective practices by communicating with people in ways that

recognize who they are, support what people already do and know, and help people build on their own strengths and local approaches.

COLLABORATIVE INSTRUCTIONAL DESIGN

Caroline S. Hackerott, Ph.D.; Arkansas Tech University

Elizabeth Gray, MBA, J.D.; Arkansas Tech University

This session sought to:

- Identify learning objectives, activities, and assessment based on NGCC competencies at the graduate and undergraduate levels delivered concurrently through collaborative design and delivery.
- Share an example of an effective undergraduate/graduate learning activity designed to meet unique learning outcomes for two separate courses.
- Explore multiple models of collaboration among faculty while ensuring course-level learning outcomes are achieved in a positive and fair learning environment for students in both courses.

Description of Presentation:

Research supports faculty collaboration as a method to increase collegueship and improve teaching skills (Palmer, 2006). The primary models of faculty collaboration include team teaching and peer-to-peer mentoring, coaching, and evaluation (Bess, 2000; Davis, 1997; Hanzuk & Kennette, 2017). This presentation reviewed the novel collaboration between two faculty members teaching separate courses.

The courses involved were not in any way structured to articulate. The first course, the undergraduate “Developing Professional EM Skills,” is intended to introduce students to multiple aspects of the EM professions through a survey or modular approach. The second course was the graduate “Foundations of Leadership and Management in EMHS.” Each course had unique learning outcomes linked to different program objectives defined by the Next Generation Core Competencies. However, both undergraduate and graduate students benefited similarly to the faculty members through collaborative instruction. These benefits included diversity of perspective and experience within their teams, between the graduate work teams and the undergraduate work teams, the modeling of collaboration as well as their personal collaborative experience, and the approximation of the undergraduate teams as learning organizations (Eison & Tidwell, 2003; Faust & Paulson, 1998; Fink, 2013). These benefits were confirmed through student reflection assignments in both classes.

The undergraduate instructor needed to create learning activities during which students worked in teams and experienced communication and decision-making challenges under differing levels of stress. Students were assigned to teams in class sessions prior to the collaborative exercise. As a result, most teams were in the “storming” or “norming” stages of team development. The intended learning outcomes included 1) demonstrate effective oral and written communication skills, 2) apply the concepts of leadership and management to the EM environment, and 3) develop capacity for critical thinking and decision-making in multiple EM environments. This learning activity was designed to force the undergraduates to use creative thinking to solve

unfamiliar problems, adapt to emerging and unforeseen challenges, and make decisions as a team under time constraints. The instructor and the students also needed a means to assess their communication skills under these different circumstances.

The graduate Leadership/Management course learning outcomes included 1) compare and contrast leadership and management characteristics, 2) generate strategic ideas to promote organizational learning as applied to EMHS policies and operations, and 3) differentiate effective EMHS leadership within daily operations from leadership under crisis circumstances. To meet these learning outcomes, the graduate instructor needed to create an opportunity for students to observe decision-making and leadership in both low- and high-stress environments. Students also needed a learning activity in which to apply the theoretical framework of a learning organization to a working team or organization. Finally, this activity provided a unique opportunity for the graduate students to practice qualitative observation and consultation techniques.

The undergraduate teams were assigned a task using a decision-making app for two class periods. None of the teams or individuals had advanced knowledge of which app would be used. The undergraduate course was a designed “iPad” course, so all students were familiar with using iPad-based apps and technology. Each app had obvious tasks and end goals. Teams used “Triple Agent!” for the first session and “Spaceteam” for the second session. The graduate students worked in partnership to develop an “observational cheat sheet” to help guide their observations and assist them in focusing on evaluating communication, leadership, and decision-making processes. The graduate teams did not interact with the undergraduate teams; they limited their activity to observation only. (The undergraduate teams knew to expect the graduate student observers to minimize any interference their presence might have had.) Graduate observers were allowed to take audio and/or video recordings if desired. However, they were not informed of this ability prior to the observation in order to encourage their own initiative.

Within 24 hours of observing the first undergraduate team activity, graduate teams provided their assigned undergraduate team an observation report. This report addressed the principles of communication, leadership, and organizational learning. Previous readings and learning activities based on Senge (1990, 1991) and Wheatley (2017) provided the foundation for their observations and reports. Graduate partners also prepared a short reflection on the process of observing and evaluating the activity. Graduate teams were then encouraged to collaboratively review and make any modifications to their observation guides. Finally, graduate teams determined criteria by which they could determine if their assigned team “learned” from the first activity and their observational report. Undergraduate teams reviewed the observation reports with guidance from the instructor. The undergraduate teams then created an After-Action Report (AAR) reflecting on their experience and how they intended to address any issues.

A week from the first team activity, graduate observers returned to the undergraduate class and observed their assigned (same as the first) team work through the challenges presented by the “Spaceteam” app. Again, graduate observers did not interact directly with the undergraduate teams. Within 24 hours of observing the team activity, the graduate students provided their teams with a second observation report. While similar to the first, the second report included a section outlining the observers’ perspective on whether the undergraduate team demonstrated

organizational learning. Both the undergraduate and graduate students completed a review and reflection exercise on the overall experience.

Following completion of the complete learning activity, the instructors concluded the activity provided the following outcomes:

- Each class maintained unique learning outcomes.
- Each class created unique evidence of learning and assessment data.
- Activities included the opportunity for student self-assessment.
- Classroom assessment, reflection assignments, and student course evaluations for both courses indicated “sticky” learning for both groups of students.

Number of Participants: 10

Questions:

- Did you seek each other out or were you assigned to work together?
- How did you know learning took place for students in each class?
- How could you do this online?
- Would you do it again?

Noted Outcomes:

Participants validated the value of intentional instructor collaboration in instructional design. Participants demonstrated a high level of interest in the potential value of faculty collaboration through multiple models.

Participants indicated a strong desire to explore the adaptation of this type of learning activity design for online learning environments.

Following the presentation, several participants indicated a desire to have additional sessions focusing on the development of learning outcomes and how to apply collaborative processes to developing learning activities, especially for online learning environments.

COMPETENT ACTION: WHY WE SHOULD CARE ABOUT IMMERSION AND ITS EFFECT ON THE INDIVIDUAL

Debra Kreisberg, Ph.D.; Colorado School of Public Health
Beth Roome, MA; Colorado Department of Public Safety

This session sought to:

This presentation set out to offer participants an experiential exercise that integrates the arising of Cognitive, Affective and Psychomotor integration in real-time. With a trend towards increasing frequency of natural and manmade disasters, the discipline of emergency management has been expanding in breadth and importance. Over the last 50 years, emergency management has undergone transformation from a profession filled by former military, police, and fire first responders with years of hands-on work experience, to a distinctive vocation with its own knowledge base, educational curriculum, credentialing, and oversight. The present-day emergency management workforce is comprised of individuals rigorously trained in the understanding of academic theoretical models but who may have little authentic field experience. Feedback from regional emergency managers in Colorado indicates a lack of practical skills amongst individuals currently seeking employment, suggesting that current educational strategies and curricula have not kept pace with this shift. The changing disaster landscape and shift in workforce, together with the updated Next Generation Emergency Management Core Competencies (Feldmann-Jensen et al., 2016), call for a review of educational strategies and priorities to ensure that emergency management curricula are meeting current demands. Knowledge Transfer and the Mastery Learning Framework: Research from the Scholarship of Teaching and Learning (SoTL) demonstrates that a mastery learning framework compels learners to develop the higher-order cognitive skills previously identified as critical to the education of effective emergency managers. As described by Ambrose and her colleagues (2010), the mastery learning framework is characterized by a three-stage progression of knowledge acquisition and application that ultimately leads to mastery within a specific content area. As mentioned previously, mastery is defined as a learner's ability to demonstrate "the application of skills (or knowledge, strategies, approaches, or habits) learned in one context to a new context" without guidance from an instructor (Ambrose et al., 2010, p. 108). To achieve mastery, learners must develop the skills, practice integrating them, and understand when and how to apply them correctly (Ambrose et al., 2010). Applying the mastery framework to the training of emergency managers, the essential competencies and functions required for effective decision making under conditions of uncertainty must be deconstructed into specific skills and sub-skills, practiced first in isolation and then gradually reintegrated and applied to various contexts. By requiring learners to apply relevant skills to different and unfamiliar settings, the knowledge grows increasingly flexible rather than being context-dependent.

Cognitive and learning research shows that this final stage of mastery—the successful knowledge transfer beyond the classroom—is less likely to occur if the learning and transfer contexts are dissimilar (Ambrose et al., 2010). Since replicating the uncertain, dynamic conditions of a true emergency response context under the structured and stable conditions of a traditional classroom is understandably difficult (Comfort & Wukich, 2013), generating an

authentic learning environment becomes the challenge. Thus, to truly develop the skill of dynamic problem-solving and operating under conditions of uncertainty, graduate emergency management curricula must utilize instructional design strategies that enhance knowledge transfer.

Description of Presentation:

Adapted exercise/simulation focused on immersive experiential activities which create an authentic learning environment tailored to a variety of needs. This whole student educational model involves the integration of cognitive, affective, and psychomotor responses inside a reality-based environment. Inclusion of these human elements drives the development of skill sets better aligned with workforce needs.

The presentation and exercise offered a dynamic space in which active learning techniques through engagement co-creates an Authentic Learning Environment. The Marshmallow Challenge adapted to respond to more injects and disruption begins to give participants an insight into working in a new team, not knowing your teammates, being in a high-pressure environment to respond to protect health and safety, and uncertain environment with incomplete information and directives. Authentic learning and authentic learning environments are models of instructional design that provide enhanced opportunities to make critical connections between knowledge and application, thus targeting the final step of knowledge transfer. Authentic learning models rely on active learning techniques such as case studies, problem-based exercises, and role-play or simulations to strengthen the connection between abstract concepts and real-life application (Lombardi, 2007). Authentic learning exposes learners to relevant problems in environments that accurately simulate the complexities and limitations of the real-world context. According to education researchers, an authentic learning environment must incorporate nine essential characteristics outlined in Table 1 (Johnson, 2012; Lombardi, 2007).

Learning activities that take place within an authentic environment engage learners beyond mere content and push them to cultivate complex skills such as distinguishing between reliable and unreliable information, recognizing pertinent patterns in unfamiliar contexts, and problem-solving in multidisciplinary and multicultural contexts (Lombardi, 2007). Simulated exercises invite learners to participate cognitively, psychologically, and socially, shifting them from an observational role to one that requires exercising judgment, critical thinking, dynamic problem-solving, and forces them to act and react in real-time to the consequences of actions taken. “Authentic learning exposes [learners] to the messiness of real-life decision making where there may not be a right or wrong answer [...] but one solution may be better or worse than others depending upon the particular context” (Lombardi, 2010, p. 10).

Number of Participants: 7

Questions:

1. How we use exercises in an online environment?
2. How can we incorporate physical movement into an online exercise?
3. What are the resource needs to add exercises and simulations to online courses?

Noted Outcomes:

We did a version of the Marshmallow challenge and it was very fun and interesting to see how the group found ways to overcome the lack of specific resources.

Overarching Questions:

1. The need for more resources to actively train in a reality-based environment in real time will develop higher level critical thinking skills. These immersive, operations-based simulations not only allow the learners to demonstrate the application of skills in a real-life situation, but also re-create the chaos, overstimulation, and uncertainty true of real disaster scenarios. Is there a place for applied learning and simulation training in the current state of the field?
2. Performing various roles as they engage in the simulated disaster scenarios, learners develop into confident, adaptive critical thinkers who can navigate highly complex, diverse, and stressful contexts and integrate effectively into disaster response teams. How will online programs find ways to integrate authentic learning environments?

Overarching Outcomes: Perceived Barriers to Integration of Simulation-Based Exercises into Curricula: Although research from the SoTL supports the use of active learning techniques to increase comprehension, knowledge retention, and learner engagement, some are skeptical about the feasibility of its integration into curricula (Silvia, 2012). Commonly perceived barriers to use include concerns that the time required for preparation and planning is excessively burdensome or demanding; reliable coverage of all session material will be more difficult; and due to time constraints, active learning techniques will replace foundational teaching time (Silvia, 2012). Additionally, due to the highly complex nature of a real disaster or emergency scenario, some might be wary of the financial and logistical hurdles to accurately recreate a simulated context. Despite these barriers, simulation-based training exercises have been found to be popular, cost-effective, useful tools when applied in the professional sphere to aid in the practice, validation, evaluation, and refinement of emergency preparedness core competencies (Department of Homeland Security, 2013; Pittman, 2010).

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CREATING CHANGE AGENTS: DEVELOPING LEADERSHIP SKILLS IN THE CLASSROOM

Carol Cwiak, Ph.D.; North Dakota State University

This session sought to:

- Address what a “change agent” is and why being a change agent is critical to effective emergency management practice;
- Discuss the leadership skills required to be a change agent;
- Present ways in which these skills can be developed in the classroom within a cooperative learning environment; and,
- Offer ways in which these skills can be carried and further developed across the curriculum.

Description of Presentation:

This presentation started with the premise that emergency management professionals must be change agents. This is necessary because: 1) emergency management’s moral purpose transcends the more practical mechanics of practice; 2) practice occurs in an increasingly complex risk environment; and, as such, 3) “an expanded and more strategic vision of the profession is required” (per Drabek, 2014). Emergency management graduates must understand the system (in its whole and parts), its complexities, interdependencies, and interconnections to be able to lead and effectuate change. The change agent role is essential to the emergency management mission and thus should be an area of focus within leadership development activities across the curriculum.

To facilitate the level of engagement necessary to develop the leadership skills change agents need, much attention must be paid to classroom climate. From the first day of class, students must understand that the classroom is a safe space for engaging, failing, laughing, learning, and sharing. In addition, behavioral expectations regarding respect, tolerance, listening, kindness, honesty, and integrity must be clearly laid out. Reconfiguring seating structure (to a circle or similar structure) creates a sense of access, accountability, and equality amongst the students. The faculty member must be authentic and role model the behavior that will be sought from students. This requires the faculty member to exhibit vulnerability and strength to establish the guardrails for classroom engagement and to be fully present for the experience.

Much forethought must go into laying the groundwork for this type of learning engagement. Students should be told at the outset that relationship and engagement skills are critical to emergency management success and will therefore be part of the class focus. Trust and ease can be built through early (and seemingly innocuous) ice breaker activities that allow the faculty member to liberate humor in the classroom.

The first step in creating change agents is developing a sense of agency in students. A sense of agency equates with a feeling of control over actions and their consequences. This is not an easy task as this often runs counter to individuals’ self-view, particularly young people’s self-view. Agency is an internal framing that requires students to take control of their own narrative. To

develop agency, a series of activities can be distributed throughout the course focused on negative self-talk, self-limiting behaviors, dealing with critics, ownership over individual actions, embracing failure for growth, developing strength, and a change agent call to action. When it is necessary to contextualize activities, the faculty member can start outside the individual (examples from the faculty member, public examples, etc.), move to application within individual experience (someone the student knows), move to self, and then to self within the emergency management context.

Developing emotional intelligence is the primary focus of change agent development. Some of the more specific skills within these areas that are developed are communication, trust, collaboration, influence, self-awareness, tolerance, listening, empathy, rapport, teamwork, initiative, motivation, problem-solving, and accountability. These skills are developed through a rich network of activities that are built upon each other through the course of the semester and across the curriculum. This level of leadership development requires not only a commitment of time and energy, but also an understanding of all the groundwork that is essential in setting the stage for the more difficult and complex activities.

Student feedback about classroom engagement where change agent activities are focused on is positive. This feedback includes the following: they know their peers well and made many new friends; they are more comfortable in the learning environment; they have greater confidence in their abilities; they are not as afraid to speak in public; they better understand others' challenges; they feel valued and respected by faculty and peers; they are willing to take the lead in group projects; and, they are more sure than ever that emergency management is where they belong.

What has been observed about students is they grow, they learn how to support each other, they own their mistakes, they value their integrity, they know that the faculty see their potential, they expand their engagement, and they see and accept their charge as change agents for what it is – challenging, necessary, and worthwhile.

Questions:

Participant questions focused on setting the classroom climate and the mechanics of some of the activities used.

Noted Outcomes:

Participants shared some techniques they have used in the classroom to enhance emotional intelligence. A couple of the participants shared personal experiences that shaped them as a part of an illustrated activity. Participants were encouraged to use any, or all, of the activities discussed to help create change agents within their programs.

CRITICAL INFRASTRUCTURE ORGANIZATIONAL RESILIENCE - A FOCUS ON LAW ENFORCEMENT FIRST RESPONDERS

Harold Broderick, J.D., MPA; St. John's University

Bernard Jones, D.Sc.; St. John's University

This session sought to:

- Continue the discussion of Organizational Resilience with particular focus on critical infrastructure resource protection regarding law enforcement.
- Discuss how organizational resilience within law enforcement is analyzed to identify strengths, weaknesses which allow for the creation of advanced training, and educational resources regarding this important and essential first-responder population.
- Present this analysis and introduce a methodology of analysis which can extend to Fire Safety and EMS.

Description of Presentation:

Professor Broderick is a decorated veteran of the New York City Police Department, where he served as an officer, detective-investigator, sergeant, detective/sergeant Lieutenant, and Lieutenant/Commander of Detectives. During his career, not only did he serve more than 20 different patrol and investigative commands, but he also participated in and planned 700+ search warrants, supervised the NYPD's first significant internet criminal investigation, and was the lead investigator on several high-profile and successful cases. In addition to assisting in the evacuation of the World Trade Center after the 1993 bombing, he also led his squad, as first responders, back to the Twin Towers on September 11th, 2001. For his bravery during a robbery/hostage confrontation in Manhattan which resulted in a point-blank shoot-out with three armed felons, Assistant Professor Broderick was awarded the Medal of Valor by the Mayor of the City of New York himself. His decorated and extensive background in the field as an investigative officer and emergency responder allow him to provide invaluable educational experiences for those who have the privilege of attending his courses in the College of Professional Studies. Professor Broderick offers an insight into emergency management that can only be gained with extensive field experience and is an invaluable addition to the breakout session.

Dr. Jones earned his D.Sc. from New Jersey City University in Civil Security Leadership, Management, and Policy and now applies his knowledge to the world of emergency management as Assistant Professor teaching Homeland Security and Emergency Management. With 20+ years of experience in enterprise business continuity and emergency management programs, Dr. Jones also conducts extensive research on disaster recovery, business continuity, and organizational resilience. Currently, he is conducting a variety of continuing research on subjects such as organizational resilience, business continuity, and emergency management metrics, data visualization, and racial and ethnic disparities in disaster preparedness and response. He circulates his research methods, results, and conclusions to both national and international conferences and symposiums.

During this breakout session, Dr. Jones discusses the common themes in his research questions: how can resilience-building help to lessen the physical and psychological stress that police officers in the field face? Research shows the unquestionable negative impact that cumulative adversities in the field can have on active officers, but despite the extensive research, there is little done to provide preventative training for oncoming police officers. Data collected from several organizational research projects suggest that specific coping mechanisms and techniques can significantly improve psychological states for officers. Dr. Jones speaks about taking the instrument (resilience training) he created and applying it to research methods on various areas of resilience in law enforcement. These techniques include breathing exercises, mindfulness training, and relaxation exercises. Again, using his research, Dr. Jones believes that these approaches should be applied to the police department as a whole, creating a foundation for organic resilience that addresses potential weaknesses through training.

Attendees are asked to contribute to the conversation, offering what individual factors of resilience could be:

- Control
- Humor
- Leadership
- Silo effect
- Confidence
- Preparedness/planning
- Physical
- Human connection

Professor Broderick discusses the overlap in these factors between individual resilience and organizational resilience, and the critical factor in both which is adaptability.

Professor Broderick transitions from this to speak about the Blue Wall of Silence. This is a hypothetical wall among officers that provides a barrier for information sharing. There is a bond among officers that produces a reluctance for newcomers. He explains that when he first entered the force, the Blue Wall was much stronger than it may be now, and there was little he could do to earn the senior officers' trust. Relating to the silo effect regarding resiliency, he lists the advantages and disadvantages that come along with breaking inter-department information silos.

With emerging data showing an overwhelming need for training and screening for resilience, the speakers highlighted again the importance of continuation of research on resiliency training in first responders and police officers.

Number of Participants: 8**Noted Outcomes:**

- Participants will explore the underlying factors/indicators which contribute to resilience.
- Participants will leave this presentation with (1) a new understanding of the indicators that contribute to resilience, (2) information about additional resilience indicators: communication, collaboration, and coordination.
- Participants will discover the results from an extensive research study which targeted law enforcement organizations within the New York Police Department (NYPD).
- Participants will hear from a 25-year veteran of the NYPD and be exposed to feedback regarding the research study results.
- Participants will be exposed to practical and meaningful course content helping college students with skill development for future careers in law enforcement and emergency and disaster management.

Dr. Bernard Jones has analyzed 15 indicators that have been identified as meaningful in the measurement of organizational resilience. These indicators may suggest areas of relative strengths and weaknesses for organizations. Recent discussions have included: Collaboration, Communication, and Coordination as additional variables with relevance to the success of an organization in achieving identified goals in emergency/disaster management planning and execution. This presentation will conduct a deeper dive into these new organizational resilience indicators.

Dr. Jones's and Dr. Broderick's contribution to this presentation and symposium includes participation in the continuing discussion of organizational resilience indicators with particular focus on the psychological dynamics of leadership including components of emotional intelligence first discussed by Daniel Goleman, and discussion of collaboration, communication and coordination, and critical thinking. These topics will be addressed in the context of formulating effective and meaningful course content for college students that will add to their skill development for their future careers in Emergency/Disaster Management and as team members in an organizational setting.

Presentation Outline:

1. Overview on the history of organizational resilience
2. Discussion Topic: Leadership & Emergency Management
3. Discussion Topic: Psychological Dynamics of Leadership
4. Communication, Collaboration & Coordination as Organizational Resilience Indicators
5. Course Content Development Recommendations and Suggestions
6. Emergency/Disaster Management Skills Development
7. Fun & interactive exercise including all participants
8. Final discussion/reflection and Future Considerations

EXPLORING THE CURRENT AND FUTURE USES OF STORYTELLING IN EMERGENCY MANAGEMENT EDUCATION

Alessandra Jerolleman, Ph.D.; Jacksonville State University

This session sought to:

- Share preliminary findings from ongoing research and the use of storytelling in emergency management education.
- Garner additional examples and resources from participants.
- Describe the uses of storytelling in emergency management education.

Description of Presentation:

The presentation provided an overview of preliminary findings from research into the use of narratives in emergency management education. Narrative learning, in which storytelling is used to teach complex topics through the sharing of narratives, is an informal strategy employed by some Emergency Management educators. As a more formal pedagogy, narrative learning is more frequently used within the medical field, particularly in nursing education. The use of storytelling within a classroom environment can take the form of individual stories, shared by the instructor or students, as well as the use of existing narratives found within literature, film, or elsewhere. These narratives can be used to highlight human behavior within real-world scenarios, including the decisions and actions of professionals within the field. Reflective analysis of these narratives allows students to improve their own future actions.

The presentation did not adopt a strict definition for storytelling, but instead considered the use of narratives and stories in both the classroom and training environment. This use might include sharing anecdotes, relying on formal documentation of prior events, or soliciting practice stories from learners. The presentation began with an overview of existing literature, noting that storytelling can be a very powerful tool for adult education and sharing the research into adult education indicates that adults learn much better when the material is relevant to their needs and when they are partners in the learning process.

The use of narratives can provide a different perspective, help learners relate to the material, and can also make the material more relevant. A few examples of storytelling that already happen in emergency management include After-Action Reports, case studies, and the use of exercise and scenario-based training. Storytelling can promote meaning-making, promote empathy and compassion, and help to transmit information and emotion. It can also be a way for teachers to present students with worst-case situations and allow learners to think about what they would do in that situation.

The preliminary survey findings which were shared are as follows:

- 90% of respondents used storytelling in some form
- 93% use personal anecdotes
- 86% use case studies
- 86% utilize scenarios
- 46% utilize After-Action Reports
- 13% use oral histories
- 13% use fiction

Only 60% of respondents were familiar with narrative pedagogy as a formal method, a way of teaching and learning that involves the lived experiences that teachers and students have had and goes beyond storytelling to facilitate meaning-making. The term itself was first coined in nursing education. In emergency management, narrative pedagogy is not being explicitly used, but storytelling is.

Number of Participants: 20–30

Questions:

- What are sources for materials, including transcripts and audio-visual, that can be used in the classroom to share stories?
- How formally must we define narrative pedagogy in order to use these tools?
- Does the method work as well for younger learners who lack emergency management experience?

Noted Outcomes:

The participants in the room were already using storytelling in their classes and training. They shared a diverse set of experiences, including successes and challenges, across a wide range of classroom environments and learners. Participants were able to learn from each other's experiences.

Several strategies were discussed, including using very vivid details, using active verbs, using drama, and using humor or suspense where possible. Storytelling can also make a hypothetical situation more relatable by highlighting everyday people.

Participants expressed an interest in learning more about narrative pedagogy in the future and identifying further ways to incorporate stories and narratives.

INTEGRATING THE CORE COMPETENCIES OF RESILIENCE INTO ENGINEERING EDUCATION

Richard A. Fosse, P.E.; University of Iowa

This session sought to:

- Identify the need to integrate resilient design strategies and emergency response skills into the undergraduate civil engineering education.
- Provide a blueprint of how to do that.
- Get feedback from participants about this concept.

Description of Presentation:

The role of civil engineers is changing. Natural disasters, industrial accidents, and the threat of terrorist activities highlight the need for today's civil engineering graduates to have a fundamental understanding of resilient design principles. In addition, because of their understanding of infrastructure systems, civil engineers often find themselves in first responder and emergency management roles. However, most undergraduate engineering programs lack the curriculum necessary to prepare their graduates for these important tasks. This presentation outlined a class that has been successfully developed and implemented at the University of Iowa to better prepare students for this emerging role.

This class consists of four units that are built around a modified version of the emergency management continuum. Unit One focuses on resilient design principles and begins by examining different definitions of resilience and critical infrastructure. Significant time is devoted to understanding a design philosophy that anticipates changing conditions and disruptions caused by deliberate attacks, accidents, or naturally occurring threats with the objective of withstanding or recovering rapidly. Overarching techniques and sector-specific techniques to accomplish this are examined. The concept of adaptive design is also studied as a means to account for uncertainties with long-term design parameters, such as the impacts of climate change. Adaptive design creates infrastructure that is specifically designed to be altered at a later date once the full impacts of one or more design parameters are better understood. This helps to prevent projects from being over or under designed.

Unit Two is focused on preparedness by teaching students the fundamentals of developing four major planning documents: Hazard Mitigation Plan, Evacuation Plan, Debris Management Plan, and Emergency Operations Plan. Within the Hazard Mitigation Plan, considerable emphasis is placed on learning to conduct the risk assessment and developing mitigation strategies. This is important because these skills can be used during the initial design of infrastructure systems, particularly critical infrastructure. Unit Two also includes a study of the National Incident Management System (NIMS) command structure to provide the basic skillset necessary to function in a first responder setting.

Unit Three shifts to roles and responsibilities during the response phase of a disaster. This includes important assessments and decisions that are necessary in the initial minutes and hours of a response. This unit also includes strategies for responses that are specific to commonly occurring natural and manmade disasters.

Unit Four begins with techniques for performing an after-action review and detailed damage assessments. Next, short-term, intermediate, and long-term recovery strategies are examined. Extra time is devoted to the long-term recovery process and the opportunities for mitigation and community improvements that may be possible.

Number of Participants: 6

Noted Outcomes:

The presentation was followed by a good discussion about the value and applicability of such a class for those who will be designing and operating our Nation's infrastructure. It was also noted that this presentation provided a new and important perspective for non-engineers in the field of emergency management.

MERGING ACADEMIA AND THE PROFESSIONS IN MULTIDISCIPLINARY, ONLINE GRADUATE PROGRAMS

Maeve Dion, J.D.; University of New Hampshire

This session sought to:

- Highlight challenges of blending various learning theories and teaching methods applicable to online, professional graduate programs for non-traditional students.
- Present one UNH program as an exemplar of approaching these challenges so as to constructively align the chosen goals and theories throughout a program, from curriculum to program management to instructor collaboration and institutional retention of knowledge.

Description of Presentation:

We face common challenges in our programs—for example: non-traditional students who are working professionals; a blend of disciplines and backgrounds in the same class; the practical need to offer online or blended modalities; and often a lack of structure to help integrate students' learning experience throughout the whole program.

This presentation demonstrated how to blend and apply various theories and methods to address such challenges. With this combination of challenges, applicable theories and philosophies include: constructivism, progressivism, humanism, behaviorism, and andragogy; as well as concepts and tools based on information processing, universal design/open education, social learning, and systems analysis.

Consideration of the chosen theories starts with an analysis of the academic and professional goals of a program, the practicalities of the format/modality of delivery, and the realities of the student base/demographics. This analysis should be a lodestone in the choice and use of our wealth of methods and tools for learning and teaching. Such analysis may also help guide the consolidation of the various theories and philosophies, and ideally distill them into conceptual categories that are easier to work with.

For example, at UNH, the M.S. Cybersecurity Policy and Risk Management (CPRM) program developed three guiding principles from its analysis. Based on the academic and professional goals of CPRM, the asynchronous online modality was structured into five e-terms of 8 weeks each (with classes taught by academic and professional instructors). Considering the demands and priorities of older students with more work experience and desire to begin applying knowledge immediately, the program focused on three themes: access and engagement, application and extrapolation, and agency and empowerment.

In the CPRM program, a focus on “access and engagement” means that, for example:

- Materials incorporate standards and best practices used in the profession.
- Assignments have an individualized context (e.g., rather than a discussion board post that summarizes materials, the students must apply those materials to their respective employers/chosen organizations).
- Students learn from each other (some assignments require peer teaching of concepts; and almost all assignments are submitted to the whole class, not just to the instructor).
- Every module includes not just learning outcomes but also the estimated effort (hours) broken into tasks (e.g., study of new materials, drafting of a written assignment, storyboarding and production of an oral presentation, etc.)
- All materials and interactions are accessible to students with particular needs; each course has a variety of assignment types; and the full course—all modules, materials, assignments, and rubrics—are made available at the beginning of the e-term.
- A “master course” is maintained for each CPRM course (a model structure, with all content, assignments, rubrics, etc.), and the materials are developed by the collective faculty (not just the instructor who is teaching the course).
- Each instructor has continuous access to the master course for every CPRM class (not just the course that the instructor happens to teach).

Following the guidelines of “application and extrapolation,” the CPRM program incorporates, for example:

- Assignments that emphasize problem-spotting, increasing in sophistication and building on assignments and skills developed in prior classes.
- The development of solutions that can be applied in particular contexts (along with explanations of why such solutions would/would not work in other contexts).
- Chunked, methodological parsing of concepts and standards (requiring answer to *why* and *how*, not just *what*).
- Penetrating questions and prompts for deeper learning, and an alignment of such questions in all assignments and exams.
- An individualized capstone project (or thesis).
- The CPRM Program Coordinator attempts to schedule instructors so as to maximize students’ exposure to different academics and professionals from related disciplines and fields (while balancing the needs of rigor, teaching experience, and personal schedules).

The third theme, “agency and empowerment,” means that, for example, in the CPRM program:

- All courses and advising sessions are transparent in our theories and methods of teaching and learning (we explain why we are learning in such a way, and why the program is designed in such a way).
- In various courses, students practice researching their various professional communities of interest and learning networks, evaluating the validity and value of resources.
- Students analyze their own individual roles (and the roles of their employers/organizations) within their professional systems and networks, including analyses and expectations of responsibility (individual and within communities).

- From the first course to the final capstone, students can customize their learning experiences (e.g., to a particular job context) while at the same time learning from the experiences of many other contexts (through the openly shared assignments).
- Every assignment has a detailed grading rubric; exemplars of good work may be provided.
- While each course is offered asynchronously online, there is an assignment due every week; students may submit early, and deadlines are individually adjusted for work travel, family health, or other exigencies.
- For each course, instructors have a customized “teacher’s workbook”—a living document developed by all prior iterations of the course; this is a guide and also a tool to document ideas and concerns that may arise in the teaching of each course.

The CPRM program emphasizes attention to all three themes in course development and in management of the program. During the presentation, references were made to help connect the exemplar actions under each theme to the related theories and philosophies for teaching and learning.

Number of Participants: 15–20

Questions:

The initial questions focused on the teacher’s workbook (an example of how the three themes influenced the management of the CPRM program), a tool provided in each of the CPRM courses. This discussion emphasized that this is not a “train the trainer” tool; the workbook does not instruct on the substance of the course material, since each instructor is already expected to be an expert in the field. Rather, the workbook provides structural information (e.g., regarding the e-term and modular layout, university policies, etc.); interconnection information (e.g., how a module related to another course, how an assignment will be revisited in the future, etc.); and “lessons learned” information captured by prior instructors (i.e., tips to give a “heads up” based on experiences with prior students in this course). The workbook also includes a section in every module for the current instructor to document ideas and concerns while teaching the class.

Subsequent participant comments contributed other examples of managing certain aspects of our common challenges.

Noted Outcomes:

From this presentation, participants should have further enhanced their abilities to:

- Describe common challenges of multidisciplinary, online graduate programs in homeland security and emergency management disciplines; and identify theories and philosophies of learning that can help address these challenges.
- Identify program management practices and implementation tools that can support particular theories and philosophies of learning while also maintaining responsiveness to demands of the professions.

- Relate the goals and practices of online programs to your own residential or hybrid modalities; conjecture as to the adaptability of the provided solutions; and reflect on the individual and institutional investments required to support programmatic and curricular changes.

RESILIENCE AND EMERGENCY MANAGEMENT: EXPLORING THE PSYCHOLOGICAL DYNAMICS OF LEADERSHIP

Antoinette Collarini-Schlossberg, Ph.D.; St. John's University
Bernard Jones, DSc.; St. John's University

This session sought to:

- Continue the discussion of Organizational Resilience with particular focus on the psychological dynamics of leadership, including components of emotional intelligence.
- Discuss organizational resilience indicators: collaboration, communication, and coordination, as well as the importance of critical thinking.
- Address these topics within the context of formulating effective and meaningful course content for college students that adds to their skill development for future careers in emergency/disaster management.

Description of Presentation:

Unfortunately, Dr. Schlossberg was not able to attend the conference, so the discussion and presentation were guided by Dr. Jones. Dr. Jones describes himself as a “pracademic” (practitioner and academic) and states that he is intrigued with organizational resilience, human nature and behavior, and metrics and statistics. The basis of the research is to measure something, and then use those results to make things better for the future.

Through examining data from the Christchurch earthquakes, Dr. Jones and Dr. Collarini-Schlossberg identified human factors that influence personal and organizational resilience. They intend to stress the importance of emotional intelligence into education and training to increase overall resilience in similar critical incidents.

The key concept behind all of the research is that resilience is rooted in human behavior, and levels of resilience may differ based on profession and administrative level. Through creating a “resilience score” and comparing metrics, key details can be elucidated and applied to other situations. Some of these metrics come from other organizational resilience research.

Specifically, a New Zealand group called Resilient Organizations, which examines resilience at the group level. They identified a list of key indicators in three categories:

- Leadership & Culture
 - Leadership
 - Staff engagement
 - Decision-making
 - Situation awareness
 - Innovation and creativity

- Change Ready
 - Proactive posture
 - Stress testing plans
 - Planning strategies
 - Unity of purpose
- Networks & Relationships
 - Effective partnerships
 - Internal resources
 - Leveraging knowledge
 - Breaking silos

Through an examination of all of these indicators, organizations can identify their strengths and weaknesses and adjust their training accordingly. Dr. Jones added communication, coordination, and collaboration to this list. Other session participants added that humor and a sense of patience would also be valuable.

Dr. Jones went on to postulate that the leader of an organization bears the onus in fostering these qualities. When leaders have a warped view of their workforce and organizational resilience, the training provided to the workforce is often inadequate to strengthen the weaker traits. Other participants added that a good leader should be the most versatile person in the room, have empathy, and recognize that proper planning is essential. The point was stressed that emotional intelligence could not be overlooked in any organization's leadership.

To develop emotional intelligence, Dr. Jones posed some questions for thought. How do you see yourself compared to how others see you? How do your actions impact relationships? What matters to you? What does conflict teach us? Do we look to win: how do we turn it into an opportunity? Answering all of these questions can give a leader valuable insight into how their employees see them and get them closer to understanding their real workplace culture. It can also assist people in avoiding harmful types of conflict and making those interactions more positive.

These concepts can also be applied to emergency management at the operational level. Dr. Jones pointed out that collaboration between responding organizations typically happens at a disaster onset. Before that, most agencies do not play well with each other, engage in rivalries, and do not commune often. Participating in community-building events leads to a better understanding of adjacent responding agencies and improves their integrated response to disasters.

Dr. Jones then directed the session to a workshop. He asked all of the participants to pair up and write down 10 characteristics that make a great leader. Every single group had trust and communication on its list. Other qualities were versatility, discipline, competence, clear standards, and respect. When the participants were asked to narrow their lists down to the top three characteristics, trust and communication were part of every pair's most valued qualities.

Through understanding which qualities are valued in leadership, leaders enhance their emotional intelligence and are more productive.

Number of Participants: 12**Noted Outcomes:**

- Participants will explore the underlying factors/indicators which contribute to resilience.
- Participants will take part in an informal and fun exercise during the presentation/workshop.
- Participants will leave this presentation with (1) a new understanding of the indicators that contribute to resilience, (2) learn about additional resilience indicators: communication, collaboration, and coordination.
- Participants will learn about the psychological dynamics of leadership including components of emotional intelligence.
- Participants will be exposed to practical and meaningful course content helping college students with skill development for future careers in emergency and disaster management.

Dr. Bernard Jones has analyzed 15 indicators that have been identified as meaningful in the measurement of organizational resilience. These indicators may suggest areas of relative strengths and weaknesses for organizations. Recent discussions have included: Collaboration, Communication, and Coordination as additional variables with relevance to the success of an organization in achieving identified goals in emergency/disaster management planning and execution. This presentation will conduct a deeper dive into these new organizational resilience indicators.

Dr. Collarini-Schlossberg is a licensed psychologist with a clinical practice including forensic issues and she has more than 20 years of experience in leadership roles in Westchester County, New York, government including a cabinet-level position as Executive Director of the County's Youth Bureau, where she participated in leadership and coordination activities that have relevance to application in the emergency/disaster management arena.

Dr. Schlossberg was the first non-police person in the country to lead a County-wide interagency gang task force that identified, documented, and responded to gang problems in the suburbs, and she has contributed training as part of the FBI training academy and NYPD Hostage Negotiation Unit on the role of women as negotiators and Responding to Aggression and violence in Hostage situations. Dr. Schlossberg also serves as Associate Professor and Chair of the Division of Criminal Justice Legal Studies and Homeland Security at St. John's University Queens, New York, where she teaches undergraduate classes in Forensic Psychology and graduate/master's level classes in Leadership, Management, and Organizational Development.

Dr. Jones's and Dr. Schlossberg's contributions to this presentation and symposium include participation in the continuing discussion of organizational resilience indicators with particular focus on the psychological dynamics of leadership including components of emotional intelligence first discussed by Daniel Goleman, and discussion of collaboration, communication and coordination, and critical thinking. These topics will be addressed in the context of formulating effective and meaningful course content for college students that will add to their skill development

for their future careers in Emergency/Disaster Management and as team members in an organizational setting.

Presentation Outline:

1. Overview on the history of organizational resilience
2. Discussion Topic: Leadership & Emergency Management
3. Discussion Topic: Psychological Dynamics of Leadership
4. Communication, Collaboration & Coordination as Organizational Resilience Indicators
5. Course Content Development Recommendations and Suggestions
6. Emergency/Disaster Management Skills Development
7. Fun & interactive exercise including all participants
8. Final discussion/reflection and Future Considerations

SETTING A CONTEXT FOR DISCOURSE IN THE EMERGENCY SERVICES CLASSROOM

Melissa Meyers, M.Ed., NRP, University of Maryland, Maryland Fire and Rescue Institute

This session sought to:

Analyze the ways in which instructors can set the tone of discourse regarding diversity and inclusion in their emergency services classes.

- Identify and address issues of diversity and inclusion in one's own beliefs.
- Create resources that allow for a diverse and inclusive discourse throughout the class.
- Identify resources to use before and during the course to identify and correct issues of diversity and inclusion within the classroom.

Description of Presentation:

Change is uncomfortable, especially when it challenges our internal belief system, our values, and the things that we hold dear. How often have you yourself said, or seen someone else say, “Suck it up,” “Toughen up,” or “It’s a joke; don’t take it so hard”? Through years of experience, we have learned that this mentality doesn’t serve us. Just as we have become more accepting of mental illness in emergency services and the effects that our professions have on our mental health, we must be more accepting of diversity and inclusion in our classrooms.

Our students have heard about or seen statements regarding diversity and inclusion. Almost every institution has a policy on it. We know it exists, but we may not have paid it much attention either. We’ve sat through courses on equity, discrimination, and sexual harassment. In my experience, emergency services providers are some of the most immature people you will ever meet, so everything becomes a joke or about how someone can’t take a joke and doesn’t see what the big deal is, or you have the other extreme, where everyone is terrified of ending up in the equity office. But how often do you have this conversation with your students? How often do you talk to them about how to treat other people? Probably not very often. It’s an awkward conversation, and there are a million different scenarios. It’s impossible to cover every single thing that could happen or foresee everything that could possibly offend someone.

If we define both of these terms, diversity is “the inclusion of individuals representing more than one national origin, color, religion, socioeconomic stratum, sexual orientation, etc.” It’s a pretty lengthy definition. Plus, it has the word inclusive in it, and inclusion is “the state/act of being included.” It is “being part of the whole.” If you Google the definition for discourse, you’re going to get something that says it is “a formal discussion of a subject in speech or writing.” It’s saying, this is the topic and having a conversation around it. So, we know that we can talk to our students. At MFRI, there’s a pre-scripted statement that gets read at the beginning of every class now. We need more than that though. We also have to consider the context in which we have these discussions with our students. We can define context as “the parts of a written or spoken statement that precede

or follow a specific word or passage, usually influencing its meaning or effect,” or as “the set of circumstances or facts that surround a particular event, situation, etc.”

What if we could provide a framework for how our students want to address issues of diversity and inclusion in the classroom? What if we actively involved them in the decision-making process and gave them permission to create rules that they agree with? To address circumstances that they may become uncomfortable with? We can by openly encouraging a discourse on diversity and inclusion from the first day of classes. We can give them more ownership over their classroom and put more of the responsibility for having interactions that are respectful of gender, race, ethnicity, sexual orientation, age, or any other thing that they think needs to be addressed by having these discussions.

Now that we have our students on the right track, we need to examine ourselves. As instructors, we are not infallible. When it comes to diversity and inclusion, we have to examine ourselves as well. The longer we’re in this profession, oftentimes, the more jaded we become. We’ve all said it about a call or a person: let nature take its course or we’re preventing natural selection. Unfortunately, this mindset often carries over into the persona that we have with other members of our internal team and leads to unhealthy perceptions.

Our perceptions are primarily shaped by our belief systems and biases. This is what happens when we only look for information that supports what we already think. There are three primary biases that end up helping shape these belief systems and biases: confirmation bias, the Dunning-Kruger effect, and cognitive dissonance. If we look at each of these in turn, confirmation bias is when we find evidence that supports our beliefs. So, if you’re a pump operator and you think that the Hand Method is better than coefficients, then you’re going to continue to look for information that supports that the Hand Method is better. The Dunning-Kruger effect is when we think we know more than we do about a topic than we actually do.

Can you think of a profession besides emergency services where people tend to only remember when you screw up? How about weather? In the words of J. Marshall Shepard, a meteorologist, we need to “expand our radius of understanding,” likening this idea to the radius of a circle: when we increase the radius, we increase the circumference, and when we increase the circumference, the entire circle gets bigger. So, some things that we can do to help change our perceptions: take inventory of personal biases. There are innumerable resources on the internet for how to evaluate yourself and your institution for bias.

Wouldn’t it be nice if we never had to worry about diversity and inclusion issues to begin with? If it was as automatic as tying your shoes in the morning? What if we had students and faculty who were self-aware of these issues? Or if there was an issue, it was easy to know exactly what to do? I think that is the most important thing. We pre-plan for MCIs and structure fires, but we don’t pre-plan for the inter-personal issues we know are going to arise. We see them on the news or social media every day. Why don’t we plan for them? What if instead of just having a policy on equity, we planned for the situations where things might go wrong and do more than make our people sit through a presentation on harassment?

Can anyone think of a policy that, although it has a number, it also has a name attached? Or anytime you think of a policy, you also think of the person who was responsible for the creation of that policy to begin with? Emergency services is a very reactionary profession. Pretty odd for a job where you're responsible for saving lives and being at the top of your field. Right? Should the equity person be someone to be feared or hated in your organization? Probably not, but it happens.

We automatically associate the equity office with negatives. If you're going to the equity office, it's because you did something wrong. Let's reverse that dialogue and start proactively going to the equity office to seek out ideas and answers before things become a problem.

Let's treat problems of equity that occur as a teachable experience, no different than a formal After-Action Report. We can use our experiences, while preserving confidentiality, to help others understand and analyze the situation so that they can provide insight into how they may have handled it as well as gain information on things to expect about what could happen and the process for something after it happens.

Number of Participants: 9

Questions:

Noted Outcomes:

The emergency services instructor can set a tone for the remainder of the class simply by addressing diversity and inclusion from the first-class session, using the course syllabus. We will begin with a brief overview of how diversity and inclusion relate to the emergency services classroom and how to include a clear outline of our student expectations in the course syllabus.

Helping our students to achieve a feeling of diversity and inclusion within our classrooms fulfills Maslow's safety and belongingness needs. Our students will view our classroom as a space in which they are safe to be themselves without fear, while working towards establishing professional relationships within the classroom. Meeting these basic and psychological needs will enable our students to grow within our classroom. Within this syllabus, expectations for creating an inclusive culture can be explained as well as provide the basis for discourse about how issues that arise throughout the class will be handled, promoting an open discussion that reassures students that this is an inclusive and diverse space, effectively setting a tone that will be continued throughout the class.

Creating these instruments prior to the start of a class also allows for self-reflection of any biases that may arise in one's own beliefs, whether known or not, allowing for continuous self-improvement. We will discuss how to create these documents to use as a foundation for fostering a classroom environment that is diverse and inclusive. Time will be spent exploring methods for identifying biases, micro-aggressions, and lateral animosity within ourselves, as instructors, as well as ways in which we can consciously work to improve these.

Resources for identifying and implementing these techniques throughout the course as issues arise will be discussed, such as institutional departments, and participants will be able to understand how to quickly identify and mitigate student issues regarding diversity and inclusion throughout the class through the use of role play. Participants are encouraged to review their institution's policies and procedures prior to attending the session.

STORYTELLING: ENHANCING EMERGENCY MANAGEMENT LEARNING IN NATIVE POPULATIONS

Jim Cedeno, Winds of Progress – Tribal Emergency Management

Norlean Cedeno, Winds of Progress – Tribal Emergency Management

This session sought to:

- Discuss the history of Storytelling in human evolution.
- Identify links that exist between Native and Western Storytelling.
- Identify the ways in which traditional Native Storytelling defined disaster knowledge.
- Identify links of Storytelling methodology to Emergency Management practices.
- Poll attendees on their jurisdiction/community's Emergency Management capacity.
- Discuss how Storytelling can be used in enhancing adult learning.
- Identify attendees' experiences with Storytelling.
- Discuss how Storytelling can be a powerful tool in adult higher education.

Description of Presentation:

This presentation was aimed at delivering information relevant to the use of Storytelling as a powerful teaching strategy in adult higher education. It also carried out a comparative analysis between traditional Native Storytelling and the historical Westernized Storytelling practices. An emphasis was made on how Storytelling practices of education go back thousands of years and was predominantly the main form of community education for both the Native and Western worlds. With the development of the written language on the Western world, the common educational approach shifted from storytelling to written manuscripts. The Native world continued to use Storytelling and the picture boards concepts as seen in ancient cave paintings.

Additional information was delivered on how Storytelling had been used through the ages by communities on both ends to pass down information to newer generations on experienced threats and hazards through stories and how the local communities were educated in taking the adequate preventive or response actions to reduce loss of life and properties, much as is done today through the field of Emergency Management. Additional information was provided on how several major catastrophic incidents related in Native stories have been confirmed through recent archeological studies and ground lidar mapping.

The attendees participated in a group poll to determine the presence of Emergency Management programs within their individual jurisdictions. Then, additional information was provided on the various ways that Storytelling has been used to enhance adult learning through more engaging strategies that involve approaches to facilitate the audio, visual, kinesthetic, and affective modes of educational delivery.

Attendees were again polled on their individual experiences with Storytelling as a cultural, traditional, and educational approach throughout their lives. They were also asked to share some of their experiences. Several attendees shared their own personal experiences with Storytelling within their families, their culture, and through educational institutions. They related that they had found Storytelling very engaging and still remember the stories as well as the storyteller and their effect upon them from the experience.

Finally, the presentation was brought to address the use of Storytelling in higher education in the field of Emergency Management to engage students more profoundly in the learning process and increase retention and the application of the knowledge gained into realistic incidents leading to a better prepared and more confident Emergency Management practitioner.

Number of Participants: 23

Questions:

1. How do you implement Storytelling into a Higher Education Emergency Management program?

Response: Stories have been a part of education for thousands of years. It was the sole form of generational transfer of knowledge prior to the widespread application of the written language. In the past, the knowledge needed to manage emergencies or disasters was passed down through the generations. It is important to remember that storytelling engages all senses of the learner and interacts with his/her personal experiences. Every time a teacher stands in front of a class, he/she is, in turn, preparing to tell a story and impart knowledge. Storytelling, through its approach, engages the learner in a more intimate and effective manner and establishes longer-lasting memories of the experience. The combination of learning styles applied in a more natural and common delivery lends itself to increased-capacity learning and critical thinking. Both of these abilities are key capabilities for higher education learning.

2. Has anybody else used Storytelling in Higher Education?

Response: Certain forms of Storytelling narratives have been used in higher education to successfully assist in the education of foreign non-native speakers. Story-type formats are used to help the students transition between their native languages and English. A variety of approaches have been used by colleges and universities with their international students' ESL programs. However, these approaches are often limited by their inability to engage the student's personal experiences into the learning process. They are usually only used for language literacy and not beyond that.

3. What are some good stories to use when teaching other adults?

Response: One of the primary functions for a successful educator is to “know their audience.” By knowing your audience, you are more familiar with some of their background and experiences. However, because of the blended student groups, it is easier to ask the students to share some of their experiences related to learning. This allows the educator to better adjust the direction and content of the material. Stories should be chosen based on how they can best enhance the specific learning needs of the students. Also, it is important to remember that stories shouldn’t just be read. A story should be told! A story should be acted! and, A story could be danced! Many cultures, both Native and Western, have traditional stories that were passed down. The students can share some of the stories that they remember listening to. Elders from a variety of ethnic groups can also be used to tell shorter related stories. Remember that today’s literature comes from many traditional stories that continued to be told over thousands of years.

Noted Outcomes:

Objective #1. Identify Storytelling as a historical and long-standing educational approach.

For thousands of years, storytelling was the sole educational approach for passing down information and traditions in both the Native and Western cultures. Lessons were taught to the community through storytelling to cover social norms, traditions, survival, and historical event occurrences. Mythology played a great part in the stories as explanations were sought for the unknown. The audience eagerly participated in a discussion in which many of them shared their own historical family and traditional stories. From those stories, together, the presenters and individuals sharing the stories identified the hidden lesson that was the main theme/ lesson-to-be-learned of their stories. Although the stories were from a variety of cultures, each person had captured and still remembered its lesson.

Objective #2. Discuss the art of storytelling to enhance adult learning for tribal/non-tribal Emergency Management programs.

Storytelling has been a consistent part of human learning. Traditional Storytelling had the listener listen, act/dance the story, and pass it down to others. It included use of all of the learning styles and related the stories to the individual’s personal experiences, leading to increased engagement and learning. The audience was especially intrigued with the concept and examples of how, through storytelling, the presenters were able to provide historical and recent examples of the use of traditional stories in community life safety response to adverse natural events. This being in alignment with the current emergency management core strategies and practices.

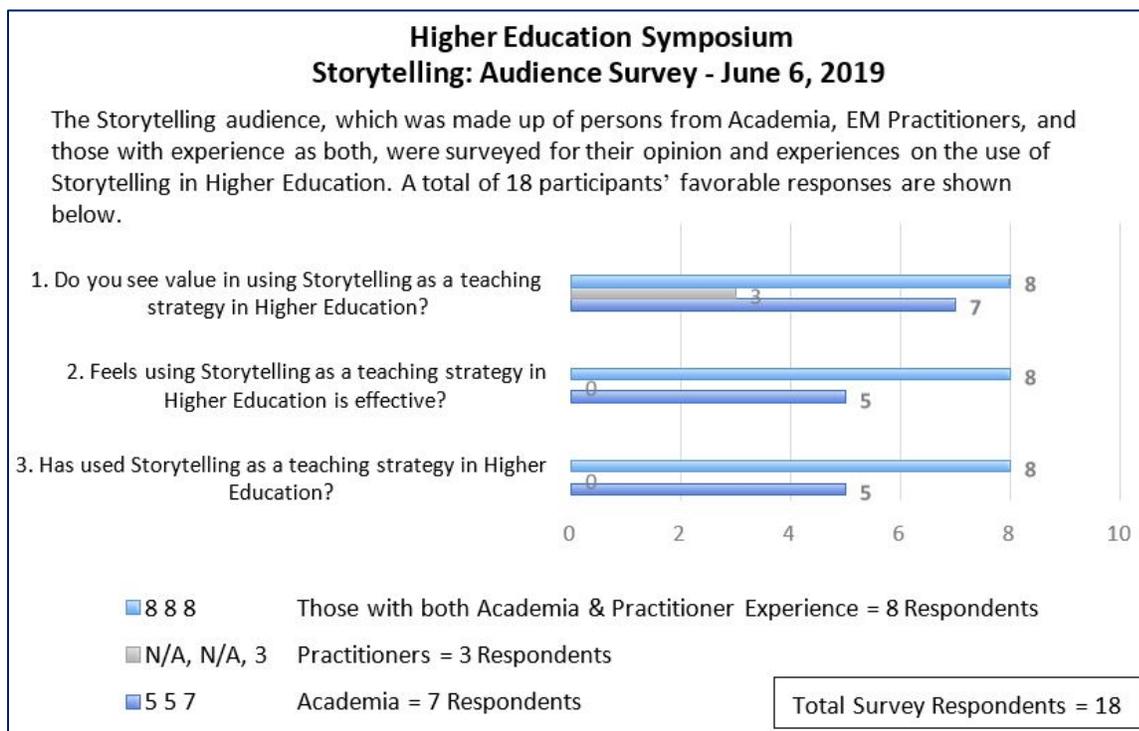
Objective #3. Discuss storytelling as a culturally appropriate educational approach to higher education and learning for Native populations.

The practice of sharing oral history, traditions, and social norms, through storytelling, was used for hundreds of generations. Each generation was entrusted with the shared wisdom of the past and lived those stories in their daily life accounting for morals, social rules, cultural traditions,

rites of passage, ceremonial knowledge, and their coexistence with their surroundings and nature. Storytelling engages all of the learner’s senses; it is repetitive and consistent, and it engrains knowledge to guide the behavior in the learner. Storytelling, coupled with standard educational methodology, helps build a stronger foundation for critical and higher-capacity thinking for the adult learner. Aligning storytelling throughout the higher educational experience can prove to be a successful approach to the education and learning for Native populations.

Audience Polling Questions Results:

1. Have you used Storytelling as a teaching strategy in Higher Education?
2. Was using Storytelling as a teaching strategy in Higher Education effective?
3. Do you see value in using Storytelling as a teaching strategy in Higher Education programs?



Storytelling: Audience Survey Analysis

THE BENEFITS AND CHALLENGES OF LIVING, TEACHING, AND WORKING IN TODAY'S DIVERSE WORLD: REVISITED

Linda Martinez, Ph.D.; California State University – Long Beach

Henry O'Lawrence, Ph.D.; California State University – Long Beach

Dale Sanders, Ph.D.; Alma College

Norma Jones, Ph.D.; Howard University

This session sought to:

This presentation revisited the focus on the importance of being aware and respectful of the variety of cultures that exist in all communities. Additionally, presenters emphasized the importance of instructors being aware of the necessity of not only being respectful but embracing the possibilities. Activities simulating working in diverse cultures were included.

1. Recognize and embrace the diversity in all sectors of today's populations.
2. Discuss techniques to employ strategies discussed in the workshop participants' classroom setting.
3. Formulate individual strategies to use in the classroom.
4. Identify own biases and formulate ways to control those biases when working in diverse settings.
5. Define ways to assist students and peers in identifying their own biases and ways to control those biases when working in diverse settings.
6. Value the richness diversity brings to the classroom.

Description of Presentation:

The presenters are comprised of a group of individuals from varying backgrounds, who bring unique and very different perspectives to the presentation, with the end result being a very eclectic combination of ideas and strategies. The members of the group represent Professors from major universities and private colleges, as well as FEMA workers and a former vice-president of an automotive engineering firm.

This presentation focused on the importance being aware and respectful of the variety of cultures that exist in today's world. One of the first slides looked at the various types of diversity in today's world with a video, "If the world were 100 people." It showed the percentages on the different types of diversity, such as gender, ethnicity, language, religion, etc.... The presenters discussed ways to recognize the various cultures and define both their differences and their similarities. Teaching methods on how to embrace differences while identifying the similarities were shared. This presentation illustrated the benefits of retaining the differences while also highlighting and communicating the similarities. FEMA workers, managers, educators, and leaders in today's world must have strategies in their repertoire of methods and skills to incorporate diversity acknowledgement and diversity training into their daily activities and regular training modules.

The presenters went to define cultural diversity and the various types of differences, such as changes in the political landscape, and women's role in the workforce. Other demographics such as the future of religion and global migration were discussed as they relate to the changing and shrinking world. The importance of opening up your world to embracing other cultures was discussed, including ideas on how to accomplish broadening your horizons. The idea of equality vs. equity was explored with illustrations to emphasize the difference. The presenters also discussed variables that influence diversity that can be both conscious and unconscious. A condensed history of racism was discussed, including the often-forgotten same race discrimination because of variables, such as skin tones even among the same race.

The presentation was a combination of speakers, interactive discussions, and activities. The session had several interactive activities to involve the attendees and give attendees not only the opportunity to explore the diversity of the world around them, but to also explore their own world in terms of diversity. The first activity, a scavenger hunt, consisted of a list of cultural activities, such as a Kwanzaa celebration and an Indian POW WOW. The attendees were asked to go around the room and ask others who had participated in the activities on the list. It was both an icebreaker and an opportunity to experience firsthand the diversity of any given group. The next activity was about halfway through the presentation after a discussion of the various types of diversity and demographic changes in today's world. This was a well-received activity that was designed to illustrate how diverse each individual's world is. The participants were asked to gather in groups of 5 to 6 and each group was given different colored beads representing the various ethnicities. A series of 18 questions about the people in everyone's world, such as the ethnicity of the individual's doctor, neighbors, friends, etc.... was read aloud. The attendees were asked to place a bead representing the ethnicity of these individuals in a clear cup. At the end of the questions, they were asked to hold the cup up and see how many colors were in their cup. Many were surprised at the lack of a variety of colors in their cups. The attendees were also given a stretchy cord to put the beads on and wear as a bracelet to remind them to think about expanding their own world. A few of the attendees had been at the previous year's presentation and it was interesting for them to see if their world had expanded in terms of diversity. A few had a much more diverse result in their bracelet.

The final exercise was a word find puzzle that included words about culture and diversity. The first five attendees to finish the puzzle were given gift bags. At the end of the presentation, the presenters played a video of "We are the World," which was a great culminating ending.

Since all the speakers come from varying backgrounds, the perspectives were very different and informative. The audience was given the opportunity to add their perspectives and experiences. The audience remained excited and engaged throughout the interactive presentation.

This was a high-energy, informative, and fun presentation. This presentation was an extension of last year's well-received presentation. The presenters incorporated many of the suggestions and thoughts of the attendees from last year's presentation. In addition, a new member was added to bring another perspective to the topic.

Number of Participants:**Questions:**

There were only a few minutes for questions, but there was a lively discussion among both the presenters and a number of experienced attendees about how to meet the need for mentors of color for young and upcoming managers. The general consensus was that the mentor did not necessarily have to be of the same ethnicity but must be open and understanding and a good listener with a genuine desire to assist in the development of the individuals.

Noted Outcomes:

The attendees were excited and astounded at some of the results of the exercises, such as the lack of diversity in their beads. Some of the attendees who had been at the 2018 session were pleased to see their worlds had broadened.

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THE CURRENT STATE OF UNIVERSITY-BASED DISASTER MANAGEMENT COURSES IN THE U.S. - OPPORTUNITIES

Kandra Strauss-Riggs, MPH, Uniform Services University

This session sought to:

- Discuss the importance of linking higher education to the evolving needs of the workforce.
- Describe the FEMA course mapping tool.
- Summarize examples of how the course mapping tool has been utilized to date.

Description of Presentation:

There are many institutions offering emergency management degrees in the United States, from course certificates to Ph.Ds. However, the content, objectives, and quality of these courses is hard to determine. The National Center for Disaster Medicine and Public Health (NCDMPH) conducted an analysis of the current state of academic degree programs in disaster/emergency preparedness/management. We identified 143 currently available degree-granting programs, ranging from associate degrees through doctoral programs and categorized their content. Limited data availability made it difficult to compare programs. Institutions offer a wide variety of foci, with objectives built around various aspects of the disaster cycle: preparation, response, recovery, mitigation. Additionally, programs vary widely in terms of delivery modality and length of curriculum. While it is encouraging that there are so many programs, the field has evolved without a strategic overview of the education needs of disaster health professionals.

To begin addressing this concern, FEMA has developed a robust course mapping tool for use by all of its grantees. Fields in the user-friendly tool map to learning objectives, modality, levels of Bloom's Taxonomy, KSAs, and other measures. This powerful and highly adaptable tool was developed by Dr. Gerry White and has been implemented by training and academic partners alike. The course mapping tool and academic program review can be utilized by individual professionals and those responsible for providing education and training to the disaster health workforce. They can assist the field in advocating for evidence-based, systematic curriculum decisions. The panel presentation included demonstration of the online tool and interactive discussion with participants.

Kandra Strauss-Riggs, Moderator: Ms. Strauss-Riggs is the Education Director at the National Center for Disaster Medicine and Public Health, where her background in public health and adult learning influences her work to build resilience, particularly among the disaster health workforce.

Gerry White, Ph.D. – Gerry White is the analytics team lead at FEMA and will demonstrate his thorough understanding of how to harness this disaster education data to make evidenced-based decisions.

Number of Participants:

Not identified

Questions:

Not identified

Noted Outcomes:

Not identified

THE ROLE OF EMERGENCY MANAGEMENT IN THE EARLY COLLEGE STRATEGY

Elizabeth Duffy, Frederick Community College

Diana Sung, Frederick County Public School System

Sam Lombardo, Frederick Community College, MACEM/PS

Kathy Francis, Frederick Community College, MACEM/PS

This session sought to:

1. Articulate the concept of Early College in the community college (Associate Degree) environment;
2. Evaluate the potential for the Emergency Management discipline to utilize the Early College concept for both academic and career pathways;
3. Assess the advantages and challenges of an Emergency Management Early College program; and
4. Generate a plan template for developing and implementing an Emergency Management Early College program.

Description of Presentation:

The concept of this session within Track 1 is to both establish an awareness of the Early College opportunity for the emergency management higher education discipline specifically, and to demonstrate steps for development and implementation of a plan to utilize Early College at the local level more generally.

The delivery process will be a combination of brief, informal presentations from the panel members followed by participant engagement in the learning and development process. Panel members will represent the local K–12 school system, the community college dual enrollment effort, the emergency management associate degree program, and the emergency management community engagement process.

The panel will first establish the concept of Early College in a discussion format with the participants. Participant interaction (via question-and-answer, facilitated by panel members) will help establish and clarify specific opportunities for the emergency management higher education discipline to benefit from the Early College concept. Participants will explore the potential advantages and assess anticipated challenges in developing local Emergency Management Early College programs.

Panel members will further discuss current Early College efforts, and the relationship between such efforts and existing academic programs: at the Associate Degree level, at the level of high school emergency management programs, and with special consideration for the inclusion of emergency management specialist apprenticeship programs. Panel members will share the roles of the school system and the institution of higher learning as partners in the development and implementation of an Early College Program.

With these concepts established, panel members will then facilitate the development of a model plan template by the participants for the development and implementation of an Early College Emergency Management program. This will be a small group-focused activity, culminating in a report-out process to share, discuss, and refine the model plan template. A closing discussion will focus on the environment and process necessary for successful implementation of an Emergency Management Early College program, the effective integration of such a program with existing K–12 and college offerings, and best practices for establishing and involving input from a collaborative and engaged advisory committee representing local academic and practitioner stakeholders.

The Frederick Community College representatives will distribute the final model plan template resulting from this session to the participants, and other interested parties, in a final report and session summary.

Number of Participants: 21

Questions:

Multiple discussion points

Noted Outcomes:

Participants discussed the concept of Early College in the community college (Associate Degree) environment and its potential advantages and challenges for the Emergency Management discipline. Program presenters will generate a plan template for developing and implementing an Emergency Management Early College program.

UNIVERSITY YOUTH LEADERSHIP IN HURRICANE RECOVERY IN THE VIRGIN ISLANDS

Michele Guannel, Ph.D.; University of the Virgin Islands (UVI), St. Thomas

Co-Authors (not present):

Michelle Peterson, Ph.D.; UVI, St. Croix

Ms. Imani Daniel, St. Thomas Recovery Team

Greg Guannel, Ph.D.; UVI, St. Thomas

Elizabeth Jaeger, Ph.D.; UVI, St. Thomas

This session sought to:

- Highlight the importance of disaster-impacted students' lived experiences in physical science courses.
- Discuss the challenges of matching local students' interests and skills with disaster recovery needs.
- Emphasize the need to build and retain leadership in sustainable economies to increase the resilience of small, isolated communities such as the Virgin Islands and Puerto Rico.

Description of Presentation:

The United States Virgin Islands (USVI) and Puerto Rico are highly vulnerable to natural disasters, as demonstrated by the 2017 hurricanes, Irma and Maria. Both Irma and Maria struck the USVI as Category 5 hurricanes, within the span of just 2 weeks. As of June 2018, the combined impacts of Irma and Maria on the USVI are considered to be the second-largest disaster in all of U.S. history, based upon the percentage job loss (nearly 12% at maximum; Bram, 2018). Of the top five most devastating natural disasters in the United States, four of these events (all hurricanes) occurred in the USVI and Puerto Rico (Bram, 2018). Because of these islands' geographic isolation, much of the immediate response was conducted by residents. Furthermore, given the transient nature of island communities, as well as their reliance on tourism, there is a need to develop and retain skilled expertise in the form of community leaders who are longtime residents of these regions – especially native Virgin Islanders who are culturally competent in the unique needs of their communities.

This presentation focused on the development of the general education science course, Science 100, at the University of the Virgin Islands (UVI). UVI is the sole institution of higher learning in the Territory, and it is the only Historically Black College or University outside of the mainland United States. UVI's demographics reflect those of the Virgin Islands: approximately 79% African Caribbean/African American, and 17% Hispanic/Latinx of any race. Since the mid-1990s (the time of the last major hurricane, Marilyn), Science 100 has focused on natural disasters and ecosystems of the Caribbean. The majority of UVI students are residents of the Virgin Islands, and they are now also predominantly survivors of the two Category 5 hurricanes. Science 100, a course that is required of all incoming freshmen, is the largest formal learning environment in the Territory.

Since the 2017 hurricanes, UVI students have engaged in updated emergency preparedness and resilience activities. These new curricular components have occurred on two levels:

- 1) for all students (100 per semester, per campus): guest presentations from a local long-term recovery group, St. Thomas Recovery Team (STRT) and UVI researchers; preparation of individualized emergency preparedness plans; and writing hurricane essays that document the lived experiences of students.
- 2) for a subset of students (average of 10 per semester, per campus): participation in service-learning projects related to hurricane impacts on human communities and stewardship of natural ecosystems, in partnership with STRT, UVI researchers, and the St. Croix Environmental Association. Example service-learning projects have included moving donated goods and note-taking for recovery group meetings; conducting outreach and activities related to stewardship of sea turtles, mangroves, and native grasses; drainage mapping and solar energy projects; emergency preparedness fairs; and building home-based gardens to enhance on-island food security (Guannel, 2018).

As described previously, the first objective of the course is for all incoming UVI students to build disaster preparedness and community connections, through the introductory course, Science 100. The integration of real-time hurricane recovery efforts and research represents a hyper-localized example of culturally relevant pedagogy (Ladson-Billings, 1992) that will increase knowledge of disaster preparedness among early-career UVI students and their communities. There appears to exist, among the narratives of 2017 hurricane survivors, a strong and unique Virgin Islander identity and evidence of post-traumatic growth alongside of post-traumatic stress.

Second, we aim to expand the service-learning initiative to Social Science 100, the other Caribbean-focused, general education course required of all incoming freshmen. Within both courses, our goal is to develop Resilience Leaders who complete service-learning projects that incorporate STEM (Science, Technology, Engineering, and Mathematics) and social science skills to address the greatest community needs. We hypothesize that service learning will impact participants on both shorter and longer-term timeframes. We expect that over a semester time-frame, service-learning participants will exhibit enhanced 21st century skills (creativity, communication, critical thinking, and collaboration; e.g. Bellanca & Brandt, 2010), greater STEM affinity, and higher engagement in course content. We are utilizing both quantitative surveys (S-STEM, Unfried et al. 2015) and qualitative data (written student assignments). Over the course of several years, we expect to see enhanced retention and persistence of these Resilience Leaders.

Together, these efforts will build towards a proposed UVI Center for Resilience and Sustainability, which may include a certificate or degree program in Emergency Management or Resilience Studies. As “resilience” is defined by both the intensity of natural hazards and the strength of community infrastructure and support services, the decade-long recovery will require transdisciplinary work across both natural and social sciences. The capacity and goals of groups such as STRT will be broadened, informed, and sustained by continual and structured youth participation, centered within these defined courses. Our hope is to build and retain skilled

Virgin Islanders in resilient economies, so that the islands will be better prepared for eventual future hazards.

Number of Participants: 4

Questions:

- **How did the major U.S. natural disasters disproportionately impact people of color?**
 - Response: For the Virgin Islands and Puerto Rico, the major hurricanes (Hugo, Marilyn, Irma, and Maria) impacted the entire islands. The demographics of these islands includes mainly people of African descent and people of Hispanic ethnicity. In the case of Hurricane Katrina (the disaster that created the highest level of employment losses), impacts were largely felt by the predominantly African American Ninth Ward of New Orleans.
- **Have you connected with Community Emergency Response Team (CERT)?**
 - Response: One of the Science 100 students who took the class before and after Hurricanes Irma and Maria, indicated that he trained with a program that sounds similar to CERT, through the local Virgin Islands Territorial Emergency Management Agency (VITEMA). According to his report, the youth-centered program was not formally activated after the 2017 hurricanes. The student did report that he utilized the tools to assist his neighbors in clearing roads and debris. We will follow up with VITEMA regarding this program and possible partnerships.
- **Did United States-based law enforcement arrive?**
 - Response: During the time of the presentation, I did not have a definitive answer based upon my observations or other anecdotal reports. Although I did not observe responders from law enforcement specifically, I did observe deployed U.S. military representatives. Interested parties are recommended to consult the USVI Hurricane Recovery and Resilience Task Force Report (2018; referenced below).

Noted Outcomes:

This project is unique in that we are building recovery and resilience skills among natural disaster survivors, who are highly vulnerable to future natural hazards. Many UVI students contributed to the immediate recovery efforts following Hurricanes Irma and Maria and already possess in-depth knowledge of hurricane impacts and the challenges of prolonged disaster aftermath. Discussion in the session helped to further frame the possibility of a certificate program in Emergency Management at UVI. In the face of future hazards, Virgin Islands residents possess intimate first-hand experience with responding to two of the most intense hurricanes to date and deep knowledge of the islands' intricate geography and cultures, relative to emergency responders originating from outside the islands. Furthermore, Virgin Islanders trained in Emergency Management and Resilience Studies offer such first-hand experience to survivors of other natural disasters elsewhere.

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USING MANIPULATIVES IN THE HIGHER ED CLASSROOM

Frannie Edwards, Ph.D., CEM, National Transportation Security Center, Mineta Transportation Institute, San Jose State University

Dan Goodrich, MPA, CEM, MEP, Mineta Transportation Institute, San Jose State University

This session sought to:

- Review andragogy and classroom application.
- Review methods for using manipulatives to support adult learning.
- Demonstrate teaching ICS in an academic setting using manipulatives/sandbox exercise.

Description of Presentation:

Andragogy promotes the use of manipulatives to engage adults in learning new theories and skills. Since adults learn best what they do, finding ways to engage mental and motor skills in the learning process will make information retention more persistent.

The first presenter discussed andragogy in the emergency management classroom. One skill set that is required for public administration is project management. Many emergency management courses also teach this skill for use in developing programs and projects within an emergency management program. There are many textbooks and PowerPoint shows available to teach project management principles, but it is often difficult for students to grasp application of the principles in a real-world setting. One strategy to make project management skills real is to get moderately simple Lego sets for building an airplane or a car. Break the students into teams, each with its own complete parts set, and have them role play various parts of the project management structure, with the goal of completing the car. By giving a set of project rules – who can speak to whom, who can be on the production floor and who is only involved in design – the students begin to see that the way roles and rules are organized within project management impacts the efficiency of the process. The application of the theories leads to students with a grasp of how to effectively apply project management in a real-world challenge.

Many public employees are required to learn the Incident Command System (ICS) because of their roles in possible emergency response. People working in transit, transportation, engineering, and finance roles may never have had experience with an actual emergency event, yet they are required to learn the principles of ICS so they can provide field support or work in an Emergency Operations Center (EOC) under the National Incident Management System (NIMS). Since most of the students will have had no personal interaction with a real Incident Command, creating a miniature emergency event allows students to apply their ICS training by managing a simulated event.

The presenters have worked with the Transportation Research Board (TRB) of the National Academy of Sciences to develop a suite of training materials for teaching ICS to adults for whom ICS is a seldom-used skill. These include a set of ICS cards that provide guidance for the first activated ICS positions for the first 15 minutes, a cardboard folder that holds the ICS forms in

protective sleeves, five brief videos (posted on YouTube) that demonstrate ICS employment in the field, and a “sandbox exercise” – a simulated traffic accident with hazardous materials spills, depicted by Matchbox-style cars, trucks, and emergency equipment. The second presenter explained the philosophy of ICS as a seldom-used skill, and the need for hands-on practical application of the ICS strategies. After reviewing the cards with the participants, he explained the activities that could be done with the adult students using the sandbox exercise. This depiction of a real-world event allows students to understand how to develop a common operational picture for an event when it is viewed from multiple ICS positions and by participants from multiple disciplines.

Participants were given quick start card sets and DVDs of all the teaching materials needed for ICS and ICS refreshers. These included the URLs for the five videos, and the cards in Word so that they can be customized for use by various professions and agencies. Four participants got to keep the ICS form folders. One of the videos gives instructions on making the folders from cardboard moving boxes to keep the cost down since these are support materials for a seldom-used skill.

Number of Participants: 14

Questions:

- Question: Why is there no Operations Chief card in the set?
Answer: This is designed for professions for whom this is a seldom-used skill, and who would have to start by inventorying their equipment and accounting for their personnel before they can develop an Incident Action Plan, unlike regular first responders who already know this information when they arrive at the scene. Safety, Logistics, and Planning positions are activated to develop a common operating picture of the incident and the agency’s resources so that an IAP can be written. At that time, an Operations Chief would be appointed to carry out the IAP. The card set complied with the ICS Field Operations Guide (FOG).
- Question: Where can I buy these folders?
Answer: You have to make the folders and the cards. There is a video that provides step-by-step guidance for creating the multi-colored laminated cards and the cardboard folder. It includes information on how to acquire the materials, such as lamination pouches and protective sleeves, and how to buy the FOGs. The card checklists are posted at the TRB site in Word format to enable modification and customization to a specific jurisdiction’s laws and protocols.
- Question: How much does it cost to build a complete folder?
Answer: Approximately \$13 for materials if you buy the California FIRESCOPE FOGs for \$6 each plus shipping.

Noted Outcomes:

The presenters circulated a separate evaluation form. The first question asked whether the information would be useful to them in their classrooms. The response from the participants was 90% excellent (5) and 10% good (4) (Likert scale of 1–5). The second question asked what was the most useful information in the class. Comments included how to systematize training, how to apply the use of manipulatives to various classroom topics (ICS and project management were discussed, but other topics could also use the approach), and that the cards could be customized for any ICS-type application.

The third question asked whether the sandbox exercise was useful in the classroom. 90% said excellent (5) and 10% said good (4) (Likert scale of 1–5). The fourth question asked what was most useful about the sandbox exercise. The answers included that they could take this concept to the classroom and apply it to other topics, that it promoted teamwork, and talking through the ICS actions.

The fifth question asked whether they had gained enough information to use manipulatives in their classrooms. 85% said that they could (5), 10% said they could (4), and 5% said he needed more information (3) (Likert scale of 1–5).

The sixth question asked what should be added, and 95% said more time. The 1-hour time slot was too tight to have a thorough discussion. One did not answer. The last question asked what should be eliminated, and 70% wrote “nothing,” while 30% left it blank.

WRITING EM CASE STUDIES FOR USE IN ACADEMIC SETTINGS – A LOOK AT THE RHODE ISLAND NIGHT CLUB FIRE PREPAREDNESS AS A CASE STUDY TEACHING TEMPLATE

Kevin Kupietz, Ph.D.; Elizabeth City State University (ECSU)

This session sought to:

- Discuss the benefits and challenges to writing case studies for use in teaching EM principles.
- Describe the intent and goals of the FEMA SIG for writing case studies for educational use.
- Discuss key elements of an educational case study.
- Explain how the example of the Rhode Island Night Club Fire can teach EM principles.
- Apply the Rhode Island Night Club Fire Case to a teaching area of interest to them.

Description of Presentation:

A good story often allows the listener to better relate to a situation in a more meaningful way than just quantitative data. The utilization of a case study in teaching Emergency Management ideas allows the instructor to take a past incident and the facts of occurrence to promote critical thinking in the student to look at solving a present or future problem.

This presentation actively discusses with participants the ideas and principles of effective case studies used in teaching Emergency Management ideas. With many learners being inductive in nature, many academic programs such as business, law, and medicine have long relied on the use of case studies in the educational field of training professionals. The idea is to take these same lessons learned from successful educational processes and translate them into the field of emergency management. Public safety education has long used examples and “War stories” to help make educational points between the academic world of theories to the real world of practicality. With well written case studies, the profession will be able to take the valuable and interesting stories and telling of fact to incorporate them into viable and reliable educational tools that will not only inspire the student but maintain their interest/engagement as well invoke their critical thinking and problem-solving skills.

The writing of cases studies can be considered an art upon itself with some guidelines to help the writer but no true right or wrong direction especially in the field of emergency management academics. It is important for the EM academic profession to move forward together in a concerted effort to provide a consistent set of case studies for helping a variety of learners at different educational levels and with differing goals. This presentation looks at the different models of case studies and discusses with the participants if EM falls into the existing models or if it needs to venture into a new direction of writing to meet the desired outcomes.

While there are many incidents worthy of looking at from a case study viewpoint in emergency management, the 2003 Rhode Island night club incident was chosen as the writing example. This incident was chosen for several reasons, including the depth of information available on the incident in easy to access open sources. The incident was short in duration but provides many opportunities for discussing current issues such as preparedness, mass casualty, recovery, victim management (short and long term), legal ramifications, and many more. One piece of information in particular of interest in this case study is the real-time film footage shot of the incident that shows the student visually what happens in such an incident. This video used with time stamps allows for critical discussions to be held on a variety of topics. This presentation focusses on the emergency management concept of Emergency Action Plans (EAP) to show what happens without them in order to discuss what might have been the outcomes with a plan that was communicated and exercised prior to the event.

Number of Participants: 36

Questions:

- What events and subject(s) do you think would make for a good case study to teach with?
- What education aids would you recommend to teaching EM ideas with case studies?
- What do you see as potential pitfalls with teaching utilizing case studies?

Noted Outcomes:

The outcome of this presentation was for the participant to come away with a better understanding of how case studies can be written and utilized in the educational field for emergency management concepts. Additionally, participants appeared to be energized to look at incidents that they have discussed or used in class to go back and write them as case studies that can add to the EM academic base of predeveloped case studies to be utilized by others. With the idea of writing emergency management case studies for the use by EM professionals in academic and field training settings, a valid and reliable library could be formed that would give instructors access to a new set of tools to better EM training and the profession thereby making communities safer.

CASE TEACHING AND LEARNING SPECIAL INTEREST GROUP (SIG)

*Dianne Walbrecker, Federal Emergency Management Agency, Emergency Management Institute
Kevin Kupietz, Ph.D.; Elizabeth City State University
Mary Anne Lyle, Federal Emergency Management Agency*

This session sought to:

- Provide a status update regarding SIG activities.
- Discuss future plans and special projects.
- Welcome new members.

Description of Presentation:

This session provided an opportunity for members of the Case Teaching and Learning SIG to share accomplishments over the past year and discuss future initiatives. The SIG is divided into subgroups. Teaching with Cases and Writing Cases have both met several times over the last year and the co-leads are discussing plans for re-energizing the subgroups. Two subgroups proposed by the SIG currently need members: Methodology/Process Implementation and Repository.

The SIG co-leads are part of the Higher Education Case Study Development Process Focus Group. That group's 2018 report, titled "A Proposed FEMA Case Study Development Process," proposed recommendations for developing this case study methodology. The SIG members discussed moving this effort forward but did not develop specific recommendations.

Dianne then introduced Mary Anne Lyle to discuss ways that the SIG can leverage its efforts with those being undertaken by her Guidance Development Office (GDO) team. Beginning in 2016, the GDO team began strategically and systematically developing case studies showcasing the use of the National Disaster Recovery Framework (NDRF) concepts and principles. The purpose was to improve the adult learning experience of disaster field cadre members responsible for maturing the disaster recovery experience fostering a more resilient Nation. The team developed a standardized methodology and approach, trained team members to ensure consistent interviewing tactics and documentation, created a standardized case study template, and emphasized the need for a strong point of view for each study.

Most recently, the GDO team launched an Intra-agency Case Study Working Group to oversee the development of IRC case studies. The IRC case studies are intended to share stories of successfully implemented recovery solutions and to spark ideas for future recovery projects.

Number of Participants: 36

Questions:

- Are the current sub-group categories still appropriate for the SIG?
- Would you be interested in participating in the online Canvas learning space?
- What do you most hope to achieve with respect to case teaching and learning in the coming year?

Noted Outcomes:

As a result of this session, participants received a briefing on activities taken by the existing CTL subgroups and recognized that the other two subgroups will require additional members. Participants at the session were encouraged to contact Jane Kushma at jkushma@jsu.edu or Jean.Slick@royalroads.ca for more information or to volunteer to serve on any of the SIG's subgroups.

PLANNING RESOURCE FOR DEVELOPING A TWO-YEAR EMERGENCY MANAGEMENT PROGRAM

Patricia McIntosh, Ph.D.; College of the Mainland

Mr. Alan Lyons, Frederick Community College, MACEM/PS

Kathy Francis, Frederick Community College, MACEM/PS

This session sought to:

- Review the Planning Resource for Developing a Two-Year Emergency Management Academic Program.
- Explore foundational elements of new academic program development.
- Review the curriculum standards and program guidelines.
- Discuss the baseline curricula for two-year emergency management academic programs.
- Explore curriculum development resources including the body of knowledge; law, doctrine, and policy; and syllabi, lesson plans, and assessment tools.
- Discuss the continual program assessment process, including assessing student outcome achievement.
- Understand the next steps for this planning resource.

Description of Presentation:

This session showcases a model two-year emergency management academic program planning resource. The planning resource will serve as a guideline for both existing and emerging two-year emergency management programs nationwide.

Number of Participants: 14

Questions:

- Multiple discussion points

Noted Outcomes:

1. Share the information within the FEMA EMI Higher Education community of two-year emergency management program leaders.
2. Develop a companion document to provide guidance on staffing and professional development, networking, marketing, program assessment, and sustainment.

EMERGENCY MANAGEMENT THEORY AND RESEARCH SPECIAL INTEREST GROUP

Joel Palmer, FEMA Integration Team Lead, Utah
Ray Chang, Ph.D.; Oklahoma State University

This session sought to:

- Introduce attendees to the EMRTSIG.
- Discuss the upcoming EMTRSIG-led session at the IRCD Researchers Meeting.
- Provide an opportunity to discuss and explore additional future collaboration.

Description of Presentation:

There was no formal presentation for the session, only a handful of slides to support group discussion. The discussion in the room included an introduction to the SIG and how attendees could participate, followed by an exploration of how emergency management researchers and practitioners could better coordinate and collaborate.

Number of Participants: 18

Questions:

- What are the incentives for both academics and practitioners that may push the two groups together or pull them apart?
 - An example given was NSF grants that have an emphasis on basic rather than applied science leading to projects that aren't oriented around solving the complex questions practitioners may be interested in.
- What is the parallel in EM research to “translational research” in medical literature?
 - The discussion focused on research and publication that aimed specifically to bridge the gaps between full-time academics and full-time practitioners in medicine and what steps were being taken to develop a similar cadre in EM. Some examples were given (including IAEM and PAR) of organizations that were looking into the issue.
- What are the mental constructs that may be influencing collaboration?
 - The examples given were the “ivory tower academic” and “battle scarred emergency manager,” and the conversation focused around how those preconceptions could be overcome.

Noted Outcomes:

As noted above, there were two primary goals of the session – introducing the SIG to Symposium attendees who weren't members and looking at the topic of the panel SIG leadership will be facilitating at the IRCD Researchers Meeting. (The discussion of additional opportunities

to collaborate in-person was included in the overview of the SIG.) There was lively and active conversation around the topic of academic/practitioner collaboration, mirroring some of the questions and discussions throughout the week during the morning plenary sessions. A few significant challenges were mentioned and discussed, including:

- Access to research: Not only do many practitioners have difficulty accessing research due to the cost of journals, but the format of many journals presents another barrier. One suggestion from the room was to include an executive summary (in contrast to the abstract) for papers intended for a practitioner audience.
- Grant requirements: As mentioned in the “Questions” section, one of the challenges from the academic side is that many grants (specifically NSF) are focused on basic research rather than applications, which can make it difficult for researchers to address relevant questions.
- Communication: A final topic that was raised (also in a plenary session) was the challenges for practitioners who don’t have relationships with researchers, both in forming those relationships and knowing who to reach out to when they have problems that might lend themselves to academic study. This issue is one the SIG is explicitly hoping to address by developing information on both researchers and their areas of focus and “big questions” from practitioners, as well as supporting efforts to partner the two communities for posters and sessions in forums like the Higher Education Symposium.

STUDENT PERSPECTIVES SIG

Terry Cooper, MS; New Haven Health Department

This session sought to:

- Provide valuable student insight on innovative and interactive concepts that enhance learning experiences for students and teaching experiences for academicians.
- Provide a forum for collaboration between students, academicians, and researchers that fosters opportunities for mentorship, research, and practical knowledge application.
- Assist in the development of evidence-based curriculum practices that encourage successful student learning facilitating advancement into the EM field.
- Help foster better mechanisms for teaching that will benefit both students and professors, including service-based learning.
- Increase student involvement in the FEMA Higher Education Symposium.
- Learn what skills for students entering the field are sought by current leaders in EM.
- Find out from students what they are seeking from current professionals in the field of EM.

Description of Presentation:

The presentation format was a round table, open discussion, to allow for a free flow of information from both the students and professionals/academicians. As stated below, there were 20 students from Alma College, who participated in a pre-SIG the on the evening of June 4th, which served as a primer for the actual SIG on June 5th. Both presentations covered the same information, attempting to derive from the participants substantive feedback from their perspectives.

Number of Participants: 32

- 20 students for Alma College participated in a pre-SIG
- 2 current professionals/academicians participated in the pre-SIG
- 5 students participated in the Student Perspectives SIG
- 5 current professionals/academicians participated in the Student Perspectives SIG
- 32 Total Participants

Questions:

- What was your motivation for pursuing an Emergency Management Degree?
- What barriers do you feel exist for Graduate/Undergraduate students entering the field?
- What Skills are needed to succeed in the field of Emergency Management?
- What have been your takeaways from the FEMA Emergency Management Higher Education Symposium?

Noted Outcomes:

The noted outcomes of this Student Perspective Special Interest Group came in several forms from the participants. As I sought to keep in line with the original objectives of the SIG, I quickly came to realize that I would learn as much from the student participants as they would from me. So to that, I will just shed light on the topics that stood out the most and had the most interesting discussions during the symposium.

First, learning what brought many of the students to the field of Emergency Management was eye-opening. This was of interest when speaking to the students from Alma College, as none of them are students with foci in Emergency Management. Instead, they are in some sort of Health Science major, but had been introduced to the field by Dr. Dale Sanders. What this does for the field is expand the depth of Emergency Management and expose how wide it spreads. This shows that Emergency Management is not just made up of first responders, but that it truly does have the breadth to encompass so many other fields of study. I myself was brought to Emergency Management through the lens of Public Health, the same as several others at the symposium, but there is room under this Emergency Management umbrella for everyone.

The next highlight was what skills are needed for students entering the field of Emergency Management. This part of the discussion was summed up in a very simple phrase: “Hard Skills versus Soft Skills.” Prior to conducting the SIG, I decided to introduce this topic to the group for discussion and it turned out to be very important. The Academicians and Practitioners who took part in the session were able to weigh in and give more credibility to the need for soft skills over the more technical or hard skills that are needed. Undoubtedly, an individual will need technical knowledge to succeed in Emergency Management, but it will take soft skills to help get said individual into a position where they can learn those hard skills. As it turns out, this conversation topic had more value than I had anticipated and should be discussed further.

Finally, this brings me to what takeaways were had from the symposium. These takeaways can be simplified with one word, opportunity. The opportunities afforded to students (and professionals) who attend the Higher Education Symposium truly cannot be found anywhere else. Whether an individual wants to be an academic or a practitioner in the field of Emergency Management, they will be given the opportunity to engage a professional who is actively doing that “thing.” Also, the opportunity to engage some high-ranking FEMA officials doesn’t hurt either. Furthermore, the barriers to engaging these professionals is much lower at this symposium than in other conferences, due to there not being hundreds or thousands of attendees. People actually have an opportunity to have conversations with one another at this event. My analogy was that the symposium is like LinkedIn, in real life. Overall, the FEMA Higher Education Symposium is an invaluable experience for students in the field of Emergency Management.

APPENDIX A: ALTERNATE TEXT

First comment image:

Emergency Management Institute
Jones, Patricia (pjones26) pjones26@Tristate.edu
'lrush@justcommunity.com'
Monday, June 10, 2019 at 10:08 a.m.
[Show Details](#)

Good morning Mr. Rush:

It was an absolute pleasure being in your Monday session last week in Emmitsburg. I honestly believe you set the bar for us the entire conference. Because of your session, we were able to connect and actually spend time with each other throughout the week. I even ran into Larry and he didn't call me Patty. I would recommend that your session be offered again and at every Higher Ed symposium because it enables the participants to make connections.

That said, please forward your slide presentation to me at this email. I will use it to prepare my report for my supervisor and hopefully be able to share what I learned with my student workers.

Thank you so much,
Patricia or Pat but definitely not Patty

Patricia D. Jones, MPA
Office Manager
Office of Emergency Management
Tennessee State University
3500 John A. Merritt Boulevard
116 Hankal Hall
Nashville, Tennessee 37290

Tennessee State University
Excellence is our Habit

Second comment image:

FEMA Workshop
Monroe J Molesky molesky2mj@alma.edu
'lrush@justcommunity.com'
Tuesday, June 18, 2019 at 3:37 PM
[Show Details](#)

Hello Lee,
I just want to reach out to you to say how much I enjoyed your Community Engagement workshop at the FEMA Higher Education Symposium. For myself not being an expert in

emergency management, I felt it was well tailored to a wide audience. I enjoy experiences and workshops like your's that encourage individual engagement and networking not just lecture. The practical examples and learning about what restorative justice was through the bridge example was enlightening. Some of the people I met during the workshop, I continued to talk to throughout the conference and are now close friends. So Thank You again!

As a side note, I would appreciate if you could send me your powerpoint and the group photo we took at the end.

Most Sincerely,
Monroe Molesky

Audience Polling Questions Results image:
Higher Education Symposium
Storytelling: Audience Survey – June 6, 2019

The Storytelling audience, which was made up of persons from Academia, EM Practitioners, and those with experience as both, were surveyed for their opinion and experiences on the use of Storytelling in Higher Education. A total of 18 participants' favorable responses are shown below.

1. Do you see value in using Storytelling as a teaching strategy in higher education?
 - 8 respondents with both Academia and Practitioner experience
 - 3 Practitioner respondents
 - 7 Academia respondents
2. Feels using Storytelling as a teaching strategy in Higher Education is effective?
 - 8 respondents with both Academia and Practitioner experience
 - 5 Academia respondents
3. Has used Storytelling as a teaching strategy in Higher Education?
 - 8 respondents with both Academia and Practitioner experience
 - 5 EM Practitioners respondents

Those with both Academia & Practitioner Experience = 8 Respondents
Practitioners = 3 Respondents
Academia = 7 Respondents
Total Survey Respondents = 18