

**EMERGENCY MANAGEMENT HIGHER EDUCATION  
PROGRAM**

**REPORT FROM THE HIGHER EDUCATION  
DISCIPLINE FOCUS GROUP**

**LESSONS LEARNED FROM ATTENDANCE AT THE  
2017 ANNUAL AMERICAN HIGHER EDUCATION  
RESEARCH ASSOCIATION CONFERENCE**

**IN SAN ANTONIO, TEXAS**

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## EXECUTIVE SUMMARY

The purpose of this report was to begin a longitudinal conversation about the scholarship of teaching and learning in emergency management (EM) primarily, but also in homeland security (HLS) education. Toward that end, a group of emergency management and homeland security academics (aka the “Discipline Focus Group”) were brought together to more deeply explore the scholarship of teaching/learning and determine a systematic approach that could be applied to both EM and HLS education.

Specifically, the Focus Group was convened at the American Educational Research Association (AERA) annual conference in order to learn how to explore the following three objectives:

1. To better understand how or if the emergency management academic discipline, students and faculty could benefit from the AERA.
2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative of the relationship with complementary academic disciplines.
3. To explore the specific role of the emergency management academic discipline in the National Training & Education System (NTES) to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.

To better address these objectives and thereby better understand emergency management education, the Discipline Focus Group convened at the AERA conference in San Antonio the end of March 2017. Their observations and lessons learned vis-à-vis the three objectives are presented in Part 1.

Part 2 of this report more tightly connects lessons learned from the AERA conference to both EM and security education. Although the AERA is a globally recognized organization known for its rigorous scholarship of teaching and learning, it is difficult to simply characterize the AERA conference. The AERA conference is a large and diverse gathering of practitioners, scholars and policy makers that explore a wide variety of issues to include research methods, analytical approaches to qualitative and quantitative data, to perceptions of diversity to policy development and implementation.

However, several themes emerged over the five-day conference the authors feel are worth noting:

1. There is a deep respect for research that undergirds the practice and continual refinement of education. Central to education research, and science in general, is contestability and the necessity for on-going inquiry.
2. Practice and research in education are tightly linked, creating effective feedback loops that allow for continual improvement.
3. Essential functions such as evaluation are well established and are being continually improved.

4. New frontiers for education practice and research are valued and pursued.
5. There is clearly a deep respect for foundational work done by the pioneers in education research.
6. Although nationally, higher education is in the midst of multiple crises, Emergency Management higher education could benefit from a deeper exploration of research methods and tools that are designed to understand the learning process. In addition, a more refined and systematic development of pedagogical and andrological research is warranted.

EM is inherently interdisciplinary. Toward that end, how main elements of the national preparedness goal might be related to other, related disciplines is also presented.

Last, findings and observations were collated and presented at the annual FEMA higher education symposium in order to engage the broader community and gather their feedback as to next steps the discipline focus group might take.

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# **EMERGENCY MANAGEMENT HIGHER EDUCATION PROGRAM**

## **DISCIPLINE FOCUS GROUP SUMMARY**

**JULY 2017**

### **Introduction and Organization of the Report**

A discipline focus group meeting sponsored by the FEMA Higher Education Program was held in conjunction with the American Educational Research Association (AERA) annual conference in San Antonio, TX from April 27-May 1, 2017. AERA has a rich history of over 100 years of working to advance “knowledge about education, to encourage scholarly inquiry related to education, and to promote the use of research to improve education and serve the public good.” That is, AERA dives deeply into the scholarship of teaching and learning in the education discipline. As such, such a conference can provide a robust understanding of the latest research methods and analytical tools in the scholarship of teaching and learning which can be leveraged by the Emergency Management and Homeland Security communities. Convening the discipline focus group at the AERA conference afforded a unique and experiential way to continue exploration of the emergency management discipline boundaries and the interdisciplinary nature of emergency management education, building on previous efforts and illuminating a several potential paths forward. The ultimate aim is to inform EM and HLS academics how to better produce and educate a national workforce that can execute the National Preparedness Goal.

### **AERA Attendees and Discipline Focus Group Members:**

- Wendy Walsh, FEMA Higher Education Program Manager and Focus Group Facilitator
- Carol Cwiak, Associate Professor of Emergency Management, North Dakota State University
- Alex Greer, Assistant Professor of Political Science, Oklahoma State University
- Kay Goss, Adjunct Faculty in the Master of Science – Executive Crisis and Emergency Management program at University of Nevada Las Vegas; Planning and Preparedness Professor at Metropolitan College, as well as Chair of their Advisory Council.
- Jessica Jensen, Associate Professor and Emergency Management Department Head, North Dakota State University
- Steven Jensen, Emergency Management Lecturer, California State University Long Beach
- Claire Connolly Knox, Assistant Professor and Emergency Management and Homeland Security Program Director, University of Central Florida
- Jane Kushma, Professor of Emergency Management, Jacksonville State University (AL)

- Lt. Mark Landahl, Homeland Security Commander, Western Maryland Information Center and Frederick County (MD) Sheriff's Office
- James Ramsay, Professor of Security Studies, Department Chair and Homeland Security Program Coordinator, University of New Hampshire

**Report Organization.** This report is organized into two parts.

**Part 1** reflects the collective discussions of focus group members as well as selected reflections that demonstrate the range of perspectives surrounding the following three objectives:

1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA.
2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative of the relationship with complementary academic disciplines.
3. To explore the specific role of the emergency management academic discipline in the National Training & Education System (NTES) to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.

**Part 2** contains several appendices including a synopsis of focus group member insights regarding the specific sessions they attended at the AERA conference, and implications for emergency management education research and pedagogy.

**Appendix I** which contains personal reflections from each Focus Group member.

**Appendix II** which contains AERA session summaries from focus group participants.

**Appendix III** which summarizes the Discipline Focus Group Plenary and Workshop Summary from the 2017 Higher Ed Symposium.

**Appendix IV** which includes the National Preparedness Goal Mission and Capabilities that is cross-walked with other, relevant academic disciplines.

## Part 1 – Focus Group Discussion

### 1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA.

The American Educational Research Association (AERA) Annual Meeting is, as stated in its title, intently focused on the educational process at the primary, secondary, and higher education levels. The meeting is widely attended by faculty, researchers, administrators, and graduate students from around the world. The discipline of emergency management does not currently have an enduring presence at the meeting.

Focus group participants confirmed that attendance at the AERA conference proved personally useful and added value to focus group discussions regarding the academic discipline of emergency management. The numerous tracks from which to select and the focused attention on educational research, pedagogical strategies, evaluation and assessment, and accreditation were all important conversations for emergency management higher education representatives to have. In addition, attendance at the conference had utility for the identification of potential speakers or “kindred-spirit” scholars to engage in the future. Participants also found the interdisciplinary nature of the conference attractive. Several sessions offered a closer look at program accreditation and unique approaches, e.g., badging, that may have application for the emergency management higher education community. Finally, it was noted that the EdCamp prototype might be a potential model for the EM Higher Ed symposium in years to come. Overall recommendations that emerged from the focus group discussion included:

- Facilitate attendance at an annual AERA conference with the explicit purpose of building research and policy capacity and relationships in a particular educational area of EM.
- Consider the involvement of students, e.g., could accompany a “fellow” or apply on their own as a mentee?
- Adopt a strategic focus for moving forward.
- Pursue win-win engagement(s) with AERA. For example, perhaps have some of their members present at the annual FEMA higher education symposium.

*Upon return from the conference, focus group participants shared a number of additional reflections regarding the benefits of or insights from AERA conference attendance. The following reflections suggest the range of perspectives that offered:*

*While much work has been completed on disciplinary purview, defining the body of knowledge, research standards, etc. over the last decade by the emergency management community, we remain in our infancy relative to the academic disciplines that form the roots of AERA.*

*This annual meeting is not an ideal gathering place for the emergency management higher education community to further advance its disciplinary directives. It could be a place where a select group of emergency management educators attend with a specific agenda to carry information back on focused topics to the attendees at the FEMA Higher*

*Education Symposium. It could also be a place for individual emergency management educators focused on educational research to expand their networks and create additional partnerships outside the emergency management higher education community.*

*The AERA sessions potentially strengthen our knowledge base and further NTES' reach and depth. Sessions on accountability, assessments, accreditations, evaluation and certification approaches are quite useful techniques and tools in striving for excellence in education and training for all the multiple disciplines served by DHS NTES.*

*If the goal is to learn how to teach EM and welcome a wide range of EM scholars, I believe AERA is a great location for us. If, however, our mission is to engage scholars in our discussion that are often "outside" of the discussion, or to expose researchers to relevant studies and methods they can use in their own research, I would recommend a few other conferences be considered, such as:*

- [The Natural Hazards Workshop](https://hazards.colorado.edu/workshop/2017/theme) – (URL: <https://hazards.colorado.edu/workshop/2017/theme>)
- [The International Sociological Association RC39 \(Sociology of Disasters\)](http://www.isa-sociology.org/en/research-networks/research-committees/rc39-sociology-of-disasters/) – (URL: <http://www.isa-sociology.org/en/research-networks/research-committees/rc39-sociology-of-disasters/>)
- [The American Political Science Association](http://www.apsanet.org/EVENTS/Upcoming-APSA-Conferences) – (URL: <http://www.apsanet.org/EVENTS/Upcoming-APSA-Conferences>)

*My experience attending the AERA Conference left me with no doubt that the emergency management higher education community can benefit from the AERA. The Association membership is comprised of scholars from diverse academic disciplines. The Association brings these scholars together because they share a mutual interest in studying education in any of its facets and disseminating what is learned to inform future education efforts, e.g., curriculum design, course design, online versus face-to-face learning outcomes, faculty development, explaining academic success/performance/degree completion at any level, diversity and cultural competence issues in education, etc.*

*There are several steps to take if we want to address these topics with purpose in emergency management higher education in spite of the challenges that have prevented us from doing so in the past. I think the first step is for our community to recognize that we have come a long way in our efforts to educate students but that we have a long way to go. The second step is to encourage folks to develop expertise in the areas/topics in central areas reflected at the Conference. We need people with this expertise so that they might research topics in emergency management education and/or share the latest and most robust findings coming out of education research so that we may learn from the research others are doing. We need to explore ways of building interest in these topics and supporting the development of expertise in those interested. The third step is to make these topics a focus of learning/discussion wherever appropriate and possible (like the FEMA Higher Education Symposium) leveraging our homegrown experts in these areas and/or the expertise of leading scholars in AERA.*

*Many of the best practices and cutting edge research and methodology presented at AERA will greatly benefit not only the discipline at large, but also individual programs (whether newly created or well established). As a program director, learning more about student, faculty, and program assessment best practices was needed. With so many of our programs offered solely online, I enjoyed the sessions focusing on online learning in higher education (i.e., sense of belonging, engagement, assessment, student-centered learning, etc.). Additionally, as the dynamics of our field and society changes and with a whole community approach, the sessions on multicultural and cultural competency education were applicable.*

*AERA describes its mission to “advance knowledge about education, to encourage scholarly inquiry related to education, and to promote the use of research to improve education and serve the public good.” As an emerging academic discipline, emergency management must be concerned with all of these aims in order to be credible, respected, and responsible. While emergency management administration and faculty are engaged with these topics through their institutions and collegial relationships, a systematic approach to the definition of emergency management pedagogy and related educational research has not yet emerged.*

*The emergency management academic discipline can benefit from association and interaction with AERA Division I – Educating in the Professions. The sessions I attended in this division included assessment, evaluation and research for professional learning programs in education, military, and medicine. The EM discipline can benefit from interaction with others providing professional education.*

*The AERA conference presents opportunities for the EM community to partner with the AERA community and to learn the skills necessary to design and conduct research on EM’s best practices, its pedagogy and its policy. In addition, the AERA community provides an opportunity for partnerships with the EM community to present findings at each other’s conferences.*

*Specifically, the EM community can learn from data, methods and policy research to better address how EM education occurs and how the EM community prepares an adequate and competent workforce.*

**2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative of the relationship with complementary academic disciplines.**

Focus group participants gave numerous examples of ties with complementary academic disciplines, to include some of the “classic” disciplines like sociology, political science, geography, anthropology, and psychology and applied disciplines like social work, public administration, criminal justice, and more recently, homeland security. In addition to previous focus group work that characterized the academic discipline of emergency management and articulated the disciplinary *purview*, other focus groups have had complementary discussions, e.g., core competencies. The disaster cycle and associated functions (e.g., mitigation,

preparedness, response, recovery) remain unique knowledge domains for emergency management.

Relationships with complementary academic disciplines continues to evolve. One relationship-building activity requiring very little effort would be to routinely engage SIGs from other professional associations. Some examples include:

- [International Research Committee on Disasters \(ICRD\) of International Sociological Association](http://www.isa-sociology.org/en/research-networks/research-committees/rc39-sociology-of-disasters/) (URL: <http://www.isa-sociology.org/en/research-networks/research-committees/rc39-sociology-of-disasters/>)
- [Section on Crisis and Emergency Management \(SECM\) of the American Society of Public Administration](https://emdispatch.wordpress.com/about/) (URL: <https://emdispatch.wordpress.com/about/>)
- [Hazards, Risks, and Disasters Knowledge Community of the American Association of Geographers](http://community.aag.org/communities/community-home?CommunityKey=21b31c21-e091-4660-afc0-7d27a7f45830) (URL: <http://community.aag.org/communities/community-home?CommunityKey=21b31c21-e091-4660-afc0-7d27a7f45830>)
- [Hazard Mitigation and Disaster Recovery Planning Division of the American Planning Association](https://www.planning.org/divisions/hazardmitigation/) (URL: <https://www.planning.org/divisions/hazardmitigation/>)
- [The CDC/NIOSH Disaster Science Research Program](https://www.cdc.gov/niosh/topics/disasterscience): (URL: <https://www.cdc.gov/niosh/topics/disasterscience>)

All workshop attendees emphasized the importance of ongoing engagement with other academic disciplines who do EM-oriented work, or who study EM-oriented issues. The workshop attendees acknowledged the associated resource constraints that limit their ability for full engagement. As an emergent academic discipline, however, emergency management needs to identify critical needs that might inform a research agenda and find ways to incentivize and support ongoing research in the field. Regularly publishing proceedings associated with research presentations given at meetings like the FEMA Higher Ed symposium is recommended. In addition, regular conversations among academic programs would help to build a community of scholars and help to establish a shared identity.

Additional reflections from participants post-meeting include:

*This question is complex and fraught with the potential to erode past work in this arena and alienate members of the emergency management higher education community. Every step the emergency management higher education community has taken as a collaborative in advancing dialogue on key topics such as identity, research standards, disciplinary purview, accreditation, etc. has been done with a focus on consensus. This approach must continue.*

*A discipline is not built in a day, or a decade. It requires a tremendous amount of discussion, debate, consensus, and contribution. This is an area that must be a primary focus of the emergency management higher education community. The community must*

*wrap its arms around all the requisite disciplinary dialogue and decisions to make forward movement.*

*The discussion of the “boundaries of the emergency management academic discipline” needs to continue in an environment that allows for robust discussion and engagement of the emergency management higher education community. The articulation of “complementary academic disciplines” is a question to be answered beyond the complete understanding of emergency management’s disciplinary boundaries and should not be entertained at this time as it serves to obfuscate the disciplinary dialogue.*

*A number of disciplines contribute to the literature we consider as core to the discipline of EM. Without tackling the question of whether EM is a discipline in and of itself, I would suggest that many of the most critical contributions come from sociology (a disasters tradition), geography (a hazards tradition), psychology (a part of the risk tradition), anthropology, criminal justice, political science, public policy, public administration, and fire administration.*

*The problems we attempt to address today are big and messy, and require the tools and perspectives from a number of disciplines to address them. Given this, I am not sure that there is an easy answer to this question until we define both key terms in our field in a consistent manner (each of the four phases, disaster, emergency, catastrophe, sustainability, resilience, etc.) and what is cannon in EM. There are efforts underway here, but many are still in their nascent stages without widespread buy-in. While I see the value and path to reach this via consensus-building activities, I would suggest that just like many other newer disciplines these issues sort themselves out in the journals and on the conference floors. What is important, however, is that we ensure that EM endures via programs and rich scholarship during this early stage.*

*So...where are we and where do we go? These questions are not easy to answer, but it is the responsibility of our community—of the people within and across emergency management higher education programs—to figure it out. We must incite ourselves into action and engage in continuing dialogue to develop the academic discipline. The academic discipline discussion is essential to our survival (within our institutions, vis a vis practitioners, our relationship with students, etc.). The work has to continue and we are ALL, EACH OF US, responsible, in fact, obligated, to do the work. “We are, therefore we must think”.*

*I believe that the question of academic boundaries and relationships to other disciplines should not be answered, even initially by this focus group. It would be far, far better if our group delivered a call to action for this work to be continued within the community, powered by its own steam, and for its own benefit.*

*The siloed nature of many academic disciplines has led to professions that reinforce isolation in practice, undermining effective interplay and development of adaptive capacity across communities prior to disaster, or more poignantly as a community responds to a disaster relying on the effective interchange between many parts of a society under stress.*

*Essentially, the emergency management academic discipline requires a blurring of boundaries in related disciplines to become transdisciplinary in thinking. Further, emergency management can demonstrate the relevance of emergency management theories and frameworks for other disciplines.*

*My main concern is that without a clear and articulated narrative we are going to continue struggling with an identity crisis. From a theoretical perspective, what does that mean? Without a clear paradigm, we run the risk of falling further behind in scholarly endeavors, theoretical development, and impact on practice.*

*In my opinion, we need to continue these conversations, but with a broader audience. As mentioned in our discussions, others have worked hard on this problem and we need to make sure their voices are heard. Having objectives to focus the discussion is important, but unsure if they should be solely from FEMA. We also cannot have these conversations once a year at EMI; we should hold quarterly conference calls, have a focus group at AERA and ASPA, and host webinars.*

*The boundaries of the emergency management academic discipline are ill-defined, but this is not necessarily a bad thing. As a discipline that borrows from many other disciplines, the primary focus has been on articulating the body of knowledge and preparing students for a range of employment opportunities in the public, nonprofit, and private sectors. Such diversity requires a broad understanding of the many potential applications for emergency management knowledge and an appreciation for the multiple contributors, both familiar and emergent. The emergency management discipline therefore casts a wide net, and must maintain connectedness with researchers and theoretical developments coming from a wide range of academic disciplines, as well as the practice communities we hope to serve and in turn, look to engage to inform future research.*

*Much of the work to address this area has been completed in developing the next generation of core competencies for emergency management. Emergency management should be viewed as a discipline among others under an umbrella of disciplines supporting the National Preparedness Goal.*

*To best accomplish goal two, we (the EM community (practitioners, scholars, policy makers, employers) – and possibly the HS community as well, need to finalize the educational boundaries and refine the education standards that define emergency management education. In addition, we need to develop compelling and relevant online EM degree programs in more institutions of higher education using state of the art instructional design strategies and pedagogies.*

**3. To explore the specific role of the emergency management academic discipline in the National Training & Education System (NTES) to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.**

According to the NTES website:

The National Training and Education System (NTES) outlines an integrated and systematic approach that unifies training and education efforts while building national security and resilience. This system is inclusive of all communities, regardless of demographics, geography, access to resources, experience with government, crime, political activity, and economic prosperity.

The following guiding principles support the NTES:

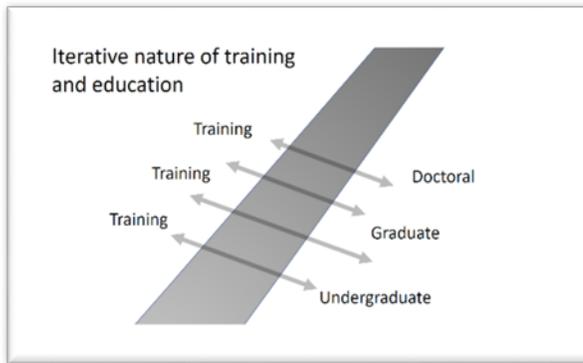
- Training and education builds and sustains capabilities that address a community or organization's priority threats and hazards;
- Development of individual competencies through training and education reinforces preparedness;
- Continual improvement of training and education programs ensures a competency base necessary for achieving security and resilience;
- Shared data and analysis informs requirements and decision-making; and
- Engaged partnerships across the whole community and through "Communities of Practice" advance training and education efforts. Through these principles, NTES enables the whole community to translate training and education needs into viable courses of action that produce successful outcomes and strengthen national preparedness.

Focus group participants discussed several ways for the EM academic discipline to support NTES and help to build and sustain the capability and capacity to achieve the National Preparedness Goal. Considerable interconnectedness exists between the numerous research streams in emergency management and the real-world policy and practice environments. Exploring ways to increase communication and interaction in a more deliberate and collaborative way is needed. Also, the preparation of a graphic to tell the interconnectedness story would be a useful conversation starter.

Additional reflections from focus group participants include:

*The relationship between emergency management training and higher education should be symbiotic. That is not to say that the training and education communities are the same, have the same mission, or contribute the same things to emergency management knowledge or practice; instead, it is to suggest that the relationship has the potential to benefit and advance each area's mission.*

*Regarding the question above, the establishment of a National Training & Education System designed to build and sustain capability and competency directives already*



*bespeaks an understanding that emergency management higher education is necessary to the achievement of the government's goals. As to the role of the discipline of emergency management, it clearly is central to understanding the needs and challenges associated with effective practice. Toward that end, the body of knowledge and ongoing research in the discipline can help inform teaching,*

*practice, and training needs.*

*While the government has no direct control over the discipline or the emergency management higher education community, collaboration to advance emergency management practice is intrinsic to education's identity. It is reaffirming to see a government agency appreciate the inherent value of guidance and partnership from the educational community in meeting its overarching goals. While the existence of the FEMA Higher Education Program has long evidenced the government's commitment to facilitating the development and growth of emergency management higher education programs and advancing the emerging discipline of emergency management, it has done surprisingly little to loop back around to reap the benefits that this facilitation can deliver. Hence, the purposeful recognition and inclusion of the discipline is a positive step toward harnessing the necessary elements to meet the National Preparedness Goal.*

*Emergency management provides a very broad platform for NTES and the creativity, partnerships, and opportunity to build it.*

*There are a number of ways for the academic discipline to support the NTES. The discipline is well-positioned to provide research support to the NTES at likely a fraction of contractor costs with more empirical evidence behind findings than what is currently provided. Given the amount of graduate students we have that want to make concrete, tangible contributions with their work, opening that line and providing data along with modest research support could foster a longstanding, mutually beneficial effort to address NTES and National Preparedness Goals. These could come in the form of synthesized literature reviews, analysis of after-action reports, meta-analyses of key topics of importance, and original data collection in the form of experimental studies, surveys of the population, and interviews and focus groups with key stakeholders.*

*The National Training and Education System (NTES) consists of two tightly related sections: training and education. Broadly speaking, deep understanding of the discipline is built in stages through the higher education system, while the more specific task-related components are built through continual training. In practice, an overlap between training and education exists. Moreover, there is an iterative interchange and between the two, as depicted in the diagram below.*

*An exploration of the relationship between training and education is best conducted through the perspective of the student. Whether one is entering the profession of emergency management early in life or later, higher education serves an essential purpose in introducing the body of knowledge, including theoretical frameworks and processes for conducting the complex work. In contrast to the deep understanding education provides, training serves as an essential function of familiarizing the student with specific functions.*

*As we continue to work on the educational challenge of blending theory with practice – primarily through experiential learning opportunities – there is a natural collaboration and synergy between emergency management higher education and NTES. Many of the goals are similar, but my concern is how much of the NTES focus is on homeland security? I think many if not all of us are already completing many of the objectives in the NTES. Yet, as an academic discipline, we need to allow the scholarly research to lead while the practice informs the research and learning objectives. This is where I see us having a great opportunity to have a voice in articulating the higher education component of the NTES. However, we go back to the original issue of not having a clear narrative and discipline paradigm.*

*The emergency management academic discipline can make significant contributions to capability- and capacity-building efforts in support of the National Preparedness Goal. In particular, emergency management faculty may be particularly well-suited to conduct evidence-based practice research, meta-analyses, and systematic reviews of practice and policy areas, given the interdisciplinary nature of the field and the integration and synthesis efforts required to deliver quality academic programs and research.*

*The emergency management higher education community is a force multiplier for achievement of the National Preparedness Goal, but needs support from a dedicated source to ensure the penetration of promising practices and recommended curriculum throughout the emergency management discipline from community and technical colleges to doctoral degree granting institutions.*

*DHS/FEMA should also consider the support of research beyond the technology portfolio managed by S&T. Other federal departments directly linked to professional practice, such as the Department of Justice (DOJ), support a wide portfolio of research to include issues critical to practice. The current technology focus, misses non-technological aspects of emergency management. A strong research to practice link is necessary for many of the human and organizational issues across the mission areas. Currently, DOJ is pushing practitioner to scholar partnerships for the management of agency-level research to improve practice. The DOJ research grant portfolio should be examined as a model to implement at DHS for emergency management research to practice partnerships and funding mechanisms.*

## **Next Steps**

Next steps could likely include the following activities:

1. The Higher Education Discipline Focus Group should continue to meet regularly to discuss how more advanced research methods and analytical approaches might best be used to optimize the pedagogy and curricula in EM/HLS academic degree programs.
2. Development of a systematic approach to the scholarship of teaching and learning in EM/HLS.
3. Development of a systematic approach to cultivating closer ties between EM/HLS and other related disciplines in terms of the scholarship of teaching and learning.
4. Continue to facilitate a discussion as to how best to prepare a national workforce that can optimally meet the national preparedness goal.

## Part 2–Synopsis of Focus Group AERA Session Summaries

### APPENDIX I FOCUS GROUP MEMBERS - ADDITIONAL REFLECTIONS

#### CWIAK

The sessions I selected to attend at the 2017 annual meeting (out of an incredibly large number of offerings), were focused (on their face) on topics I thought would potentially add value to the emergency management community. The sessions I focused on dealt with topics such as: leadership and scholarship development across the professions; negotiating relationships; issues in faculty development; research, recruitment and development of academic leadership; local and community partnerships; motivation; and, teaching from the lens of complexity. All the sessions I attended were either poster, panel, or grouped paper sessions. I found most of the sessions to have components that I personally found interesting or intriguing.

My attendance at the annual meeting was to specifically assess the extent to which the emergency management higher education community's engagement in future AERA annual meetings would be of value. My conclusions shared herein are a result of my individual assessment from my own observations, my reflections on the overall conference having had the opportunity to hear the comments of my colleagues who also attended the annual meeting, and my many years in the emergency management higher education community.

#### **1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA.**

First and foremost, the AERA conference reminded me of how much remains to be done in the emerging discipline of emergency management. While much work has been completed on disciplinary purview, defining the body of knowledge, research standards, etc. over the last decade by the emergency management community, we remain in our infancy relative to the academic disciplines that form the roots of AERA. The long-established disciplines are building, critiquing, and evolving from established foundations that have been cemented over decades and have the luxury of thin-slicing topics down to their finest details. We (the emergency management community) are just not there yet.

Now, that is not to say that there is not value in individual faculty members attending and learning about defining issues in areas such as accreditation or assessment. There is potential value in having advocates from the emergency management community interested in advancing the emergency management higher education community's efforts in such areas to learn from others' work. However, the conference may not be the best mechanism for advancing this directive as the presenters in any given section have been put together as a collective based on themes or threads within topical areas and the depth of material coverage can be quite ad hoc, educational level based (i.e., primary, secondary, higher education), and have specific value to a narrow area (e.g., educational leadership).

Second, the AERA annual meeting has a purposeful social justice and advocacy via education focus. The meeting title for 2017 was “Knowledge to Action: Achieving the Promise of Equal Educational Opportunity.” The meeting title for 2018 is “The Dreams, Possibilities, and Necessity of Public Education.” While social justice and advocacy are of importance to educators, the meeting focus is strongly evident across many sessions and results in fewer sessions on areas that are more functional or foundational to higher education.

Third, the sessions at the annual meeting were most strongly leaning into primary and secondary education. That is not to say that there is not value to be gleaned from such sessions, but it is another mechanism by which the number of sessions of focused value to higher education are reduced. To discern the potential value in each of these sessions prior to attendance, attendees must review all the paper abstracts to discern the extent to which they will touch on analogues topics in higher education.

Finally, the meeting attendance is tremendous – over 20,000 attendees in 2017 – and is quite expensive to attend. With shrinking travel budgets, educators must be purposeful in their selection of the conferences they attend and need to get as much bang for their buck as possible. This annual meeting is not an ideal gathering place for the emergency management higher education community to further advance its disciplinary directives. It could be a place where a select group of emergency management educators attend with a specific agenda to carry information back on focused topics to the attendees at the FEMA Higher Education Symposium. It could also be a place for individual emergency management educators focused on educational research to expand their networks and create additional partnerships outside the emergency management higher education community.

## **2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative relationship with complementary academic disciplines.**

This question is complex and fraught with the potential to erode past work in this arena and alienate members of the emergency management higher education community. Every step the emergency management higher education community has taken as a collaborative in advancing dialogue on key topics such as identity, research standards, disciplinary purview, accreditation, etc. has been done with a focus on consensus. This approach must continue.

The challenge with this question is that emergency management is an emerging discipline that currently is being shepherded by many institutions under other disciplines. This is what has allowed the emergency management higher education community to gain program mass in its initial emergence as an academic offering. Over the past ten years, the emergency management higher education community has done much work the area of the “boundaries of the emergency management academic discipline.” This has been slow, but necessary work that has started to frame the discipline independent of its supporting disciplines.

It has been clear for years that many emergency management programs have suffered at higher education institutions because of a lack of disciplinary identity. Professional identity, which is much more easily crafted, has driven many educational programs and have caused strife for faculty and departments that are not able to plant the adequate roots to survive and thrive in the

academic community. This makes emergency management higher education programs vulnerable to the whims of administrators and budget cuts.

A discipline is not built in a day, or a decade. It requires a tremendous amount of discussion, debate, consensus, and contribution. This is an area that must be a primary focus of the emergency management higher education community. The community must wrap its arms around all the requisite disciplinary dialogue and decisions to make forward movement.

Emergency management is its own unique discipline, but it is far from being recognized as such by other disciplines. Having a discussion at this juncture about complementary disciplines is odd in that the bulk of emergency management's body of knowledge (as an emerging discipline) comes from other disciplines leaning into emergency management. The important question is not which other disciplines can we work with, but is instead focused on what body of knowledge emergency management rests upon as it moves forward as a discipline. Relevant literature can be found in the specific research conducted under the mantle of many other disciplines (e.g., sociology, geography, public administration, anthropology, etc.). This is not unlike the history of other disciplines that found their roots when they coalesced around an existing body of knowledge and moved forward in a new discipline from there.

Hence, the discussion of the "boundaries of the emergency management academic discipline" needs to continue in an environment that allows for robust discussion and engagement of the emergency management higher education community. The articulation of "complementary academic disciplines" is a question to be answered beyond the complete understanding of emergency management's disciplinary boundaries and should not be entertained at this time as it serves to obfuscate the disciplinary dialogue.

### **3. To explore the specific role of the emergency management academic discipline in the National Training & Education System to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.**

The relationship between emergency management training and higher education should be symbiotic. That is not to say that the training and education communities are the same, have the same mission, or contribute the same things to emergency management knowledge or practice; instead, it is to suggest that the relationship has the potential to benefit and advance each area's mission.

Regarding the question above, the establishment of a National Training & Education System designed to build and sustain capability and competency directives already bespeaks an understanding that emergency management higher education is necessary to the achievement of the government's goals. As to the role of the discipline of emergency management, it clearly is central to understanding the needs and challenges associated with effective practice. Toward that end, the body of knowledge and ongoing research in the discipline can help inform teaching, practice, and training needs.

While the government has no direct control over the discipline or the emergency management higher education community, collaboration to advance emergency management practice is intrinsic to education's identity. It is reaffirming to see a government agency appreciate the

inherent value of guidance and partnership from the educational community in meeting its overarching goals. While the existence of the FEMA Higher Education Program has long evidenced the government's commitment to facilitating the development and growth of emergency management higher education programs and advancing the emerging discipline of emergency management, it has done surprisingly little to loop back around to reap the benefits that this facilitation can deliver. Hence, the purposeful recognition and inclusion of the discipline is a positive step toward harnessing the necessary elements to meet the National Preparedness Goal.

## GOSS

- American Educational Research Association has much to offer “the Whole Community” emergency management professors, students, practitioners, governments, private and nonprofit sectors, and the public.
- This paper discusses the relevancy to the emergency management discipline and the National Preparedness Goal to build and sustain

“A secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigation, respond to, and recovery from the threats and hazards that pose the greatest risk.”

Personal note: Due to the 11 inches of rain, flooding and wind, which hit my farm and home in Arkansas on Saturday night and Sunday morning, I had to attend to this disastrous impact on my driveway, deck, and barn, drastically limiting my participation in sessions that day to only one session.

## GREER

### **1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA.**

The EM discipline can certainly benefit from attending the AREA conference. With the numerous tracks, diverse attendees, and wealth of resources available this conference can serve as a meeting where EM can both contribute to the larger dialogue and take lessons back to their own classrooms. While my initial ventures into sessions left something to be desired, given that there were numerous tracks attendees could follow it was easy to simply shift focus and find another session with valuable information. Of note, I found that there was much to be gained within the mixed methods, distance learning, and teaching qualitative methods sections.

If the goal is to learn how to teach EM and welcome a wide range of EM scholars, I believe AERA is a great location for us. If, however, our mission is to engage scholars in our discussion that are often “outside” of the discussion, or to expose researchers to relevant studies and methods they can use in their own research, I would recommend a few other conferences be considered, such as:

- [The Natural Hazards Workshop](https://hazards.colorado.edu/workshop/2017/theme)  
(URL: <https://hazards.colorado.edu/workshop/2017/theme>)

- [The International Sociological Association RC39 \(Sociology of Disasters\)](http://www.isa-sociology.org/en/research-networks/research-committees/rc39-sociology-of-disasters/)  
(URL: <http://www.isa-sociology.org/en/research-networks/research-committees/rc39-sociology-of-disasters/>)
- [The American Political Science Association](http://www.apsanet.org/EVENTS/Upcoming-APSA-Conferences)  
(URL: <http://www.apsanet.org/EVENTS/Upcoming-APSA-Conferences>)

It may be of benefit to hold it at a new venue each year, relegated to the goals of the group assembled. I would also strongly recommend the involvement of doctoral degree-seekers in future groups.

**2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative of the relationship with complementary academic disciplines.**

A number of disciplines contribute to the literature we consider as core to the discipline of EM. Without tackling the question of whether EM is a discipline in and of itself, I would suggest that many of the most critical contributions come from sociology (a disasters tradition), geography (a hazards tradition), psychology (a part of the risk tradition), anthropology, criminal justice, political science, public policy, public administration, and fire administration. Given the emergence of the discipline from the Cold War, much of our early work centered around absolving ourselves of many of the disaster myths of a panic-stricken reaction to crises.

The problems we attempt to address today are big and messy, and require the tools and perspectives from a number of disciplines to address them. Given this, I am not sure that there is an easy answer to this question until we define both key terms in our field in a consistent manner (each of the four phases, disaster, emergency, catastrophe, sustainability, resilience, etc.) and what is cannon in EM. There are efforts underway here, but many are still in their nascent stages without widespread buy-in. While I see the value and path to reach this via consensus-building activities, I would suggest that just like many other newer disciplines these issues sort themselves out in the journals and on the conference floors. What is important, however, is that we ensure that EM endures via programs and rich scholarship during this early stage.

**3. To explore the specific role of the emergency management academic discipline in the National Training & Education System (NTES) to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.**

There are a number of ways for the academic discipline to support the NTES. The discipline is well-positioned to provide research support to the NTES at likely a fraction of contractor costs with more empirical evidence behind findings than what is currently provided. Given the amount of graduate students we have that want to make concrete, tangible contributions with their work, opening that line and providing data along with modest research support could foster a longstanding, mutually beneficial effort to address NTES and National Preparedness Goals. These could come in the form of synthesized literature reviews, analysis of after-action reports, meta-analyses of key topics of importance, and original data collection in the form of experimental studies, surveys of the population, and interviews and focus groups with key stakeholders.

I am frequently asked by my students about how often I interact with FEMA, HUD, and the state. My answer is typically not as much as I would like to. We do this research so that they will improve policies and programs to reduce disaster losses and improve recovery efforts. Establishing closer ties between the problems we explore, the interests of the government, and the actual issues experienced on the ground can only better EM.

## **J JENSEN**

### **1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA**

My experience attending the AERA Conference left me with no doubt that the emergency management higher education community can benefit from the AERA. The Association membership is comprised of scholars from diverse academic disciplines. The Association brings these scholars together because they share a mutual interest in studying education in any of its facets and disseminating what is learned to inform future education efforts, e.g., curriculum design, course design, online versus face-to-face learning outcomes, faculty development, explaining academic success/performance/degree completion at any level, diversity and cultural competence issues in education, etc.

Individuals within the emergency management higher education community may have an interest in any number of education topics, and, where such an interest exists, I believe they would benefit from AERA membership and attending AERA Conferences. I certainly benefitted from the experience.

While attending the AERA Conference, I pursued sessions along several themes. The themes of the sessions included: program assessment, assessment of student learning, explaining undergraduate and graduate student academic success/performance/degree completion, and online learning and online course design. I learned a lot about each of these specific topical areas on a personal level. I will use what I learned within the scope of my job to the benefit of the students I serve and my program.

Yet, while I learned a great deal with respect to specific subjects, I think I learned more from reflecting on the link, or lack thereof, between what I was seeing and hearing at the Conference and where emergency management higher education is currently in its development. It is the results of this reflection that I think are critical to share with the broader higher education community for our collective reflection as we move forward.

The AERA sessions showed just how reflective various academic disciplines are about the methods by which they educate students, how they evaluate the success of their efforts to educate, what all is involved in understanding student progress, and other topics. Presenters shared the results of their efforts to study these topics. Many of the presentations reflected work built on strong theoretical foundations (such as motivation theory, learning theories, etc.) and robust, sophisticated methods. Not all of the presentations were equal in this regard. And, to be sure the presentations revealed that each academic discipline was struggling with these issues and how to best approach interventions to correct any issues discovered. Nevertheless, the sophistication of conversations, the purposefulness of pursuing the research topics, the

seriousness with which everyone—presenter, discussant, and attendee alike—engaged with the research presented were impressive. Observing all of this over the course of the Conference, I found myself wondering:

- Where is this kind of study in emergency management education?
- Where are these kinds of conversations happening in emergency management?
- Who/Where are the scholars in our field who are looking at these issues (I know of only a couple of people and they are not currently engaged in new work on related topics)? Where is the expertise to guide research and discussion on these topics?
- What scholarly outlets in our field would welcome publications on these topics?

There is no doubt in my mind that we need the kinds of research that I saw presented at the Conference. I believe our community would benefit from these kinds of discussions. I also recognize that there are a lot of challenges that have prevented these kinds of discussion up to this point.

There are several steps to take if we want to address these topics with purpose in emergency management higher education in spite of the challenges that have prevented us from doing so in the past. I think the first step is for our community to recognize that we have come a long way in our efforts to educate students but that we have a long way to go. The second step is to encourage folks to develop expertise in the areas/topics in central areas reflected at the Conference. We need people with this expertise so that they might research topics in emergency management education and/or share the latest and most robust findings coming out of education research so that we may learn from the research others are doing. We need to explore ways of building interest in these topics and supporting the development of expertise in those interested. The third step is to make these topics a focus of learning/discussion wherever appropriate and possible (like the FEMA Higher Education Symposium) leveraging our homegrown experts in these areas and/or the expertise of leading scholars in AERA.

## **2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative relationships with complementary academic disciplines**

There was a period of several years where the emergency management academic community was engaged in discussion about whether emergency management was, could, or should be an academic discipline, and, the purview of the academic discipline if one were to be desired. Many within our community supported the notion that disciplinary status was desirable for a variety of reasons. There was discourse about the characteristics of academic disciplines and the extent to which emergency management reflected those characteristics. Several characteristics were identified as missing or in development. Efforts were undertaken to begin to build the foundation for an academic discipline including building those missing disciplinary characteristics. All along the way, efforts were made to solicit feedback, make changes that reflected feedback, and build consensus.

Unfortunately, the work seems to have halted at a certain point. It appears, from my perspective, that the consensus across the community that had existed has eroded fairly rapidly (even while some still identify with the points of consensus). I believe that some of the things that were needed to support sustaining that consensus did not materialize quickly enough and that some of the things needed to support continuing progress above and beyond the consensus that did exist were (and remain) also not present. As a result, the community seems to me still extremely fragmented (although perhaps less so than it had been before these efforts were undertaken) and the work to develop the academic discipline has not progressed beyond where it was left (e.g., refining the initial consensus-based definition of the academic discipline, articulating clearly the boundaries of the emergency management academic discipline and how it relates to other academic disciplines).

So...where are we and where do we go? These questions are not easy to answer, but it is the responsibility of our community—of the people within and across emergency management higher education programs—to figure it out. We must incite ourselves into action and engage in continuing dialogue to develop the academic discipline. The academic discipline discussion is essential to our survival (within our institutions, vis a vis practitioners, our relationship with students, etc.). The work has to continue and we are ALL, EACH OF US, responsible, in fact, obligated, to do the work. “We are, therefore we must think”.

I have been involved in these disciplinary discussions and in the past. I am proud of the work that was done and am eternally grateful to all of the people I worked with and all of the discussions on the phone, at conferences, and through surveys that I and so many have engaged in while undertaking those efforts. Yet, I look back now and I often feel as though the efforts failed...or, at the very least, have withered on the vine. I am convinced that for this situation to change we have to change the way we approach the work, i.e., not work these issues out through FEMA Higher Education Program-convened focus groups.

I believe that the question of academic boundaries and relationships to other disciplines should not be answered, even initially by this focus group. It would be far, far better if our group delivered a call to action for this work to be continued within the community, powered by its own steam, and for its own benefit. It would be far, far, far better for each of us who participated in the group to individually write papers addressing this prompt and submit them to a scholarly outlet (and fantastic if it were an open access outlet). It would be even better if someone initiated a paper and then the following papers debated what was said in the first and expand/change/introduce something new in keeping with the author’s views. It would also be far, far, far better for each of us to actively participate in building mechanisms by which “the collective” works together on an ongoing basis without requiring FEMA’s support to meet and do work. It would be far, far, far better if we then reached out to others and invited them to join in the work and in the network. It would be far, far, far better if we each beat the same drum of the urgent need to work together as a collective on a host of issues—including maturing an answer to this prompt.

## **S JENSEN**

### **1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA,**

Emergency Management Higher Education sits at the intersection of two critical public functions, which are striving to find grounding amid broader social changes underway. For example, Emergency Management seeks to better understand its relationship to Homeland Security, at the same time as figuring out how to implement “Whole of Community” approaches. Meanwhile, Higher Education is a primary vehicle for preparing emergency managers and expanding the Emergency Management body of knowledge. Yet, the ability of the higher education institution to deliver a relevant, equitable, at scale, and reasonable cost education is being broadly questioned.

The academic discipline of emergency management has established itself and grown remarkably job over the last couple decades. At the same time, emergency management could advance further through a better use of education research. AERA represents a community of education researchers and practitioners ready to offer their diverse expertise.

The education research community has a well-developed body of knowledge, including approaches that can inform an array of education issues for many emergency management programs. Access to such research is invaluable. To get a sense of the breadth of existing educational research, briefly review the list at the AERA Special Interest Groups on their website. The broad range of issues germane to emergency management higher education is remarkable. Personally, I attended a variety of representative sessions. See the attachments for more information.

### **2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative relationship with complementary academic disciplines.**

The siloed nature of many academic disciplines has led to professions that reinforce isolation in practice, undermining effective interplay and development of adaptive capacity across communities prior to disaster, or more poignantly as a community responds to a disaster relying on the effective interchange between many parts of a society under stress.

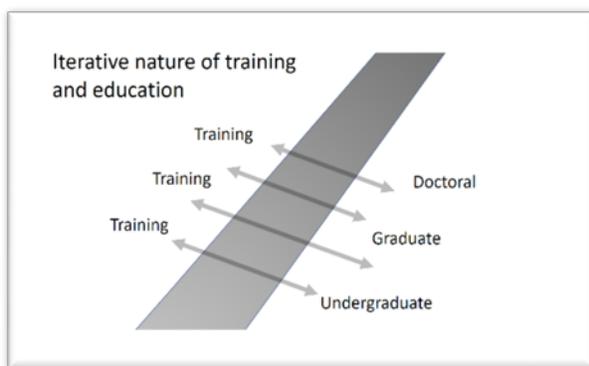
The emergency management academic discipline should be equipping students to guide the adaptive capacity within our communities and broader networks. In practice, emergency managers must be able to see the whole picture, particularly inter-relationships and patterns of change. The practice of systems thinking and the study of complex adaptive systems deepens our understanding of the interactions of non-linear relationships between many activities, exhibiting reactions, changes, and adaptations over time. An understanding of complex systems enables the emergency management professional to operate in adaptive ways, allowing systems to function better under stress.

Essentially, the emergency management academic discipline requires a blurring of boundaries in related disciplines to become transdisciplinary in thinking. Further, emergency management can

demonstrate the relevance of emergency management theories and frameworks for other disciplines.

**3. To explore the specific role of the emergency management academic discipline in the National Training & Education System to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.**

The National Training and Education System (NTES) consists of two tightly related sections: training and education. Broadly speaking, deep understanding of the discipline is built in stages through the higher education system, while the more specific task-related components are built through continual training. In practice, an overlap between training and education exists. Moreover, there is an iterative interchange and between the two, as depicted in the diagram below.



An exploration of the relationship between training and education is best conducted through the perspective of the student. Whether one is entering the profession of emergency management early in life or later, higher education serves an essential purpose in introducing the body of knowledge, including theoretical frameworks and processes for conducting the complex work. In contrast to the deep understanding education provides, training serves as an essential function of

familiarizing the student with specific functions.

The interplay between training and education can allow the emergency manager to function more effectively. The depth of knowledge derived through education allows training to be placed in a specific context, and the student is then able to build and inter-relate their understanding across the cognitive, psychomotor, and affective domains. Moreover, the interplay between education and training allows the system to continually improve when participants can apply their deeper understanding at any level within the system. Ideally, the student's ability to influence improvement increases through their education, constructively contributing to practice and informing the body of knowledge.

**KNOX**

**1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA.**

Throughout the AERA Conference, I keep this objective at the front of my mind. Compared to related disciplines (e.g., Political Science, Public Administration, Business Administration, Sociology, Public Health), the emergency management discipline (and homeland security in a broader focus) is relatively new.

## Primary

Many of the best practices and cutting edge research and methodology presented at AERA will greatly benefit not only the discipline at large, but also individual programs (whether newly created or well established). As a program director, learning more about student, faculty, and program assessment best practices was needed. With so many of our programs offered solely online, I enjoyed the sessions focusing on online learning in higher education (i.e., sense of belonging, engagement, assessment, student-centered learning, etc.). Additionally, as the dynamics of our field and society changes and with a whole community approach, the sessions on multicultural and cultural competency education were applicable.

Within one week of returning from this conference, I created a team of colleagues and we are creating an online platform for our online masters programs within our School of Public Administration to create a sense of belonging (the top, statistically significant indicator of student retention in online programs). This week I will be discussing the pedagogy behind this platform with a FEMA Trainer who is interested in implementing something similar in his online certificate program.

### **2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative of the relationship with complementary academic disciplines.**

I valued the ongoing formal and informal discussions we had among our group at this conference. I enjoyed getting to know everyone better; it is only when we understand each other's background that we better understand that individual's unique perspective. Being relatively new to this discussion, I listened and assessed the various viewpoints and perspectives of each group member. We did not always agree, but that is needed as we move closer to a more clearly defined discipline.

My main concern is that without a clear and articulated narrative we are going to continue struggling with an identity crisis. From a theoretical perspective, what does that mean? Without a clear paradigm, we run the risk of falling further behind in scholarly endeavors, theoretical development, and impact on practice- Public administration struggled with this for decades and arguably fell behind the more rapid development of the political science discipline. Many of the same questions we discussed throughout the conference and in our phone conversations are the same ones public administration asked for decades: Where is the discipline to be housed? What is the main methodological approach? What is the primary theoretical framework? What is our narrative? What are our core competencies?

In my opinion, we need to continue these conversations, but with a broader audience. As mentioned in our discussions, others have worked hard on this problem and we need to make sure their voices are heard. Having objectives to focus the discussion is important, but unsure if they should be solely from FEMA. We also cannot have these conversations once a year at EMI; we should hold quarterly conference calls, have a focus group at AERA and ASPA, and host webinars. As I mentioned in a dinner meeting, I have listened to many conversations at ASPA's Section for Emergency and Crisis Management regarding this issue. The main take away I perceive is that we are stalemated with individuals on both sides of the issue – primarily the

divide between emergency management and homeland security disciplines. For many, whether these disciplines are separate or together is the first hurdle prior to discussing accreditation standards.

Regarding accreditation standards, I suggest (as others have before me) NASPAA's Universal Competencies which is what my program uses (following the lead from the School of Public Administration). These competencies are broad and applicable to emergency management and homeland security.

Universal Required Competencies: As the basis for its curriculum, the program will adopt a set of required competencies related to its mission and public service values. The required competencies will include five domains: the ability

- to lead and manage in public governance;
- to participate in and contribute to the policy process;
- to analyze, synthesize, think critically, solve problems and make decisions;
- to articulate and apply a public service perspective;
- to communicate and interact productively with a diverse and changing workforce and citizenry.

Here is a link to the [NASPAA's Accreditation Document](https://naspaaccreditation.files.wordpress.com/2015/02/naspaa-accreditation-standards.pdf):

(URL: <https://naspaaccreditation.files.wordpress.com/2015/02/naspaa-accreditation-standards.pdf>)

### **3. To explore the specific role of the emergency management academic discipline in the National Training & Education System (NTES) to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.**

As we continue to work on the educational challenge of blending theory with practice – primarily through experiential learning opportunities – there is a natural collaboration and synergy between emergency management higher education and NTES. Many of the goals are similar, but my concern is how much of the NTES focus is on homeland security?

I think many if not all of us are already completing many of the objectives in the NTES. Yet, as an academic discipline, we need to allow the scholarly research to lead while the practice informs the research and learning objectives. This is where I see us having a great opportunity to have a voice in articulating the higher education component of the NTES. However, we go back to the original issue of not having a clear narrative and discipline paradigm.

## **KUSHMA**

- 1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA.**

AERA describes its mission to “advance knowledge about education, to encourage scholarly inquiry related to education, and to promote the use of research to improve education and serve the public good.” As an emerging academic discipline, emergency management must be concerned with all of these aims in order to be credible, respected, and responsible. While emergency management administration and faculty are engaged with these topics through their institutions and collegial relationships, a systematic approach to the definition of emergency management pedagogy and related educational research has not yet emerged.

- 2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative of the relationship with complementary academic disciplines.**

The boundaries of the emergency management academic discipline are ill-defined, but this is not necessarily a bad thing. As a discipline that borrows from many other disciplines, the primary focus has been on articulating the body of knowledge and preparing students for a range of employment opportunities in the public, nonprofit, and private sectors. Such diversity requires a broad understanding of the many potential applications for emergency management knowledge and an appreciation for the multiple contributors, both familiar and emergent. The emergency management discipline therefore casts a wide net, and must maintain connectedness with researchers and theoretical developments coming from a wide range of academic disciplines, as well as the practice communities we hope to serve and in turn, look to engage to inform future research.

- 3. To explore the specific role of the emergency management academic discipline in the National Training & Education System (NTES) to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.**

The emergency management academic discipline can make significant contributions to capability- and capacity-building efforts in support of the National Preparedness Goal. In particular, emergency management faculty may be particularly well-suited to conduct evidence-based practice research, meta-analyses, and systematic reviews of practice and policy areas, given the interdisciplinary nature of the field and the integration and synthesis efforts required to deliver quality academic programs and research.

## **LANDAHL**

- 1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA,**

The emergency management academic discipline can benefit from association and interaction with AERA Division I – Educating in the Professions. The sessions I attended in this division included assessment, evaluation and research for professional learning programs in education,

military, and medicine. The EM discipline can benefit from interaction with others providing professional education.

Each discipline is facing issues in addressing complex social problems that require interaction across professions. One of the core methods to deal with changing conditions for educating professionals is to examine cognitive tasks necessary for success. This process results ensure that programs are aligned to profession conditions and extend beyond tacit knowledge and behavioral tasks. Cognitive Task Analysis (CTA) provides a method to drill down to cognitive issues that represent many of the “soft skills” necessary to navigate a profession in an increasing complex environment.

**2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative relationship with complementary academic disciplines.**

Much of the work to address this area has been completed in developing the next generation of core competencies for emergency management. Emergency management should be viewed as a discipline among others under an umbrella of disciplines supporting the National Preparedness Goal.

One possibility it is to contract with an educational psychologist or other capable of providing process oversight to exploring the discipline using CTA. CTA could be used as a method to undertake a complete reexamination of knowledge, skills, abilities and behavioral and cognitive tasks for success in emergency management profession.

**3. To explore the specific role of the emergency management academic discipline in the National Training & Education System to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.**

FEMA Higher Education Program Office remains an essential focal point for the emergency management education community. It continues to serve as a vital and important link to the researchers and educators preparing the next generation of emergency management professionals.

The question is how should the office adapt to changing conditions. Initial efforts to support the development of books and other course materials to reinforce emergency management higher education programs may no longer be necessary. Of more vital importance are efforts to define the discipline and the core knowledge, behavior and cognitive tasks necessary for the emergency manager of the future. The Office should support the conduct of a comprehensive study of emergency management practice using process consultants using tools such as Cognitive Task Analysis (CTA) to ensure alignment of curriculum to knowledge outcomes and behavioral and cognitive tasks critical for emergency management practice.

In addition, the Office should support research into emergency management education. Research should include effective teaching practices specific to emergency management education. Research topics should include the effectiveness of pedagogy, andragogy and use of instructional technologies, such as simulations and virtual environments to support the attainment of 21<sup>st</sup> Century skills for emergency managers. Among the research supported should be the conduct of

a comprehensive study of emergency management practice using process consultants and methods such as Cognitive Task Analysis (CTA) to ensure alignment of curriculum to not only to knowledge outcomes and behavioral tasks, but cognitive tasks and “soft skills” critical for emergency management practice. This should be supported by a University Center of Excellence focused on Emergency Management Education, Research and Professional Practice.

The emergency management higher education community is a force multiplier for achievement of the National Preparedness Goal, but needs support from a dedicated source to ensure the penetration of promising practices and recommended curriculum throughout the emergency management discipline from community and technical colleges to doctoral degree granting institutions.

DHS/FEMA should also consider the support of research beyond the technology portfolio managed by S&T. Other federal departments directly linked to professional practice, such as the Department of Justice (DOJ), support a wide portfolio of research to include issues critical to practice. The current technology focus, misses non-technological aspects of emergency management. A strong research to practice link is necessary for many of the human and organizational issues across the mission areas. Currently, DOJ is pushing practitioner to scholar partnerships for the management of agency-level research to improve practice. The DOJ research grant portfolio should be examined as a model to implement at DHS for emergency management research to practice partnerships and funding mechanisms.

Partnerships with groups such as [Betagov](http://www.betagov.org/) (URL: <http://www.betagov.org/>) that supports small scale randomized control trial studies, could be leveraged to encourage research to practice partnerships.

## **RAMSAY**

### **1. To better understand how or if the emergency management academic discipline, student and faculty could benefit from the AERA.**

Specifically, the EM community can learn from data, methods and policy research to better address how EM education occurs and how the EM community prepares an adequate and competent workforce.

- Social network theory and Q-methodology provide methods we can use to identify relative importance of factors that impact EM student success.
- Policy advocacy is both a local and federal affair. Identifying and then leveraging social networks and IOs can greatly enhance policy advocacy.
- In professions such as emergency management and homeland security, skill acquisition and collaboration skills are critical to professional effectiveness. When designing online curricula in EM, it appears that letting students explore solutions to complex problems before lectures are formally presented will enhance both collaboration skills as well as learning. This lesson is applicable to both face to face education as well as online education.

- Online education is a credible and reliable way to bring complex and dynamic curricula to target populations that have limited access to face to face education options.
- Responsible assessment is possible in online education.
- Much is known about how to optimize learner success in online environments.
- Online delivery allows for both undergraduate and graduate level education, including doctoral education.

**2. To discuss the boundaries of the emergency management academic discipline and work toward articulating a clear narrative relationship with complementary academic disciplines.**

To best accomplish goal two, we (the EM community (practitioners, scholars, policy makers, employers) – and possibly the HS community as well, need to finalize the educational boundaries and refine the education standards that define emergency management education. In addition, we need to develop compelling and relevant online EM degree programs in more institutions of higher education using state of the art instructional design strategies and pedagogies.

**3. To explore the specific role of the emergency management academic discipline in the National Training & Education System to build and sustain the needed capabilities and competencies to achieve the National Preparedness Goal.**

The NTES should be tied tightly to the education core of modern EM academic programs. In addition, the NTES should be the repository for the National Preparedness Goal in that the NTES houses and facilitates the education, training, a national research agenda and the body of knowledge that should support the development and ongoing sustainability of the National Preparedness Goal.

The greater EM community should also consider building research partnerships with other disciplines (such as occupational safety and health, worksite health promotion, homeland security, risk management) who all share the same intellectual core knowledge base. The EM community is a meta-discipline, that is, a discipline of disciplines. In this way, EM works best by leveraging not only the operational, and tactical expertise from other disciplines, but research and policy expertise as well. The latter point is made to so that moving forward, the EM community can know more deeply why it does what it does, what works best and what does not from the perspective of a national preparedness goal.

To build a capable and adequate US national workforce, we will likely need to bring EM academic programs to both working professionals and to areas of the country that currently don't have them in an efficient and cost effective way. This implies more profound use of online education strategies as well as the ability to link EM education to corollary education such as homeland security and occupational safety and health. Further, this implies that we will need to improve policy analysis and budgeting skills in the EM practitioner community (and therefore

the EM education programs) so that EM practitioners become better change agents and better equipped to influence local and state and federal emergency management policy.

## **APPENDIX II AERA CONFERENCE SESSION SUMMARIES**

**April 27-June 4, 2017**

### **Thursday, April 27**

Pre-Conference Seminar. Soka Studies and Value Creation Curriculum: The Urgency of Non-Western/International/Comparative Curriculum Inquiry

This three hour seminar focused on a Japanese approach to education.

Key points were:

1. Emphasis on educating the whole person: cognitive, affective, psycho-motor, and spiritual.
2. Foster a way of thinking about empathy (note: empathy was also identified by Harvard Business School as a leading indicator of success in international business). Imaginative empathy is an idea to be explored, particularly as a component of design thinking and policy.
4. Emphasis on meta-cognition, or pushing toward a deeper understanding of the wide range of functions interacting.
5. Developing our ability to engage in dialog as a way of deepening our explorations into the unknown. Dialog is seen as a way of becoming, with radical listening the key. The point of dialog is to get at what is in others, finding our way through the essential tension that will exist between humans and seeking to collapse the boundaries that separate us. In considering the challenges of working in our field, at the policy levels particularly, a deeper understanding of engaging in dialog might be worth exploring.
6. Make the familiar “unfamiliar” points toward seeing our challenges from new perspectives (also following idea of invitational rhetorical analysis).
7. Links to a deeper understanding and appreciation of democracy as a way of being.

I am in contact with this group of professors and look forward to continuing the dialog.

### **Epistemological Frontiers: Disrupting Curriculum Theory**

This session explored the ideas of curriculum based on post-colonial perspectives on education taking root in Latin America. There is considerable alignment with other indigenous peoples’ movements globally, as well as native American perspectives on emergency management and broader environmental issues.

### **New Approaches to Critical and Comparative Case Study Methodologies**

Relationship to EM Discipline: The case study method is widely used in emergency management research. The workshop detailed the key points of divergence among the prominent case study methods. The session showed the nuanced division between the major case study methods

outlined by Yin, Meriam, Strauss & Corbin and the new method proposed by Bartlett (session presenter). The session provided value for both personal enrichment and contribution to the research activities in the emergency management discipline.

### **Deweyen Discourses on Democracy** (substituted for Design Thinking and Learning Improvement, which was too basic in content)

This roundtable session explored democracy and epistemology, with a focus on the work of John Dewey on democracy and education. Further reading of Dewey's perspective on educating for democracy will be relevant. Dewey's discourses on democracy and civic virtues are well regarded in the education sector and timely in our field as we strive to develop whole of community approaches to hazards.

### **An Examination of School Policies in Practice**

Abstract: The term "school to prison pipeline" (STPP) refers to policies and practices, which increase the likelihood of school-aged children being forced out of school and into the criminal justice system. This research, part of a larger mixed method study investigating pathways into the STPP in Virginia, was conducted as part of the National Institute of Justice's Comprehensive School Safety Initiative. It reports on a content analysis of 82 Memorandum of Understanding (MOU) between Virginia school divisions and Law Enforcement Agencies (LEAs) engaged in School Resource Officer (SRO) Program partnerships. Findings suggest that while there is strong collaborative potential amongst VA school-LEA partnerships, there is a need for further inquiry about the way that they MOUs enacted.

Relationship to EM Discipline: Session did not provide a direct link to emergency management education, other than consideration of School Resource Officers as an element of preparedness and prevention in schools as soft targets for targeted violence.

### **Leadership Development Across the Leadership Pipeline**

Examined ethical drift in educational leadership and the role of moral literacy. A top recommendation on the mentoring for aspiring assistant principals was the focus. Building efforts toward professional competence in education leadership should start long before the person is in primetime responsibility. One of the presentations was a comparative study of two professional schools, and the more relevant experience and independence given to the student and the young professional educator, the more effective later during service. A presentation called "Through the Looking Glass" compared superintendent's preferred characteristics for principals, to educational leadership/constituent council and Texas principal standards. Superintendents preferred principals who most resembled themselves. Emergency management has some of that proclivity as well, making diversity in leadership a challenge in the short term and even in the long term.

### **Managing Complex Systems for Implementation and Scale**

Going to scale with EM HiEd in the US and abroad, both in sufficient depth and scale, is a challenge that is addressed in the education sector. Well-designed studies showed the relevance of accepted policy processes being linked with buy-in amongst practitioners. Critical for success

are researcher-practitioner partnerships when working in new areas. This leads to the development of shared theoretical and empirical understandings of practice. Focus on programs that are proving to develop good outcomes (in EM HiEd this would be indicated by success in achieving agreed EM goals in the field) and focus on important factors in these successful programs. Innovation Teams, solid data and continuous improvement cycles were important in the education sector. Other insights were that achieving scale is not a linear path and a dual bottom up/top down approach may be required to engage all stakeholders.

### **Opening Plenary**

Three leaders in education addressed problems of access and attainment in higher education. Particularly troubling was the increase in degree attainment from 1960 to now, with the lowest socio-economic groups increasing from 6% to 8%, while the higher socio-economic groups increased degree attainment from 38% to 70% during the same period. As we need emergency management professionals that are representative of the communities they serve, this equity issue should be addressed. There are strong support programs that are proving successful and EM HiEd would do well to address how insights from successful support programs might be taken to scale. The challenges are significant, as a sub-standard primary education makes success in university unlikely without substantial guidance. Additionally, financial aid not keeping pace with rising college costs. High levels of food insecurity and housing problems amongst students are also inhibiting college performance.

### **A Closer Look at the Self in Research and Practice**

#### Notes

- Context and social identity matter for how people learn.
- Land grant act really kicked off education in U.S.
- Contemplative practices –listening competence, mindfulness, compassion.
- Sample size for a new instrument – at least 100-150 participants.
  - Item response theory to examine extreme response style.
  - Extreme response style – has a tendency to select end points on a Likert scale.
  - This is a huge threat to validity
  - STEM and non-first gen students did better on exams
  - Extreme responses differ across groups (but we're not sure how just yet)
- Expressing the self – self-authoring in an era of parental involvement
  - Baxter Magolda's theory of self-authorship

- How students renegotiate being an adult
- Constructivist grounded theory
  - Reality is socially constructed
- Abductive Theory Building - Abductively tested against what we already know.

### **Critical and Participatory Approaches to Qualitative Research**

Notes:

- Femtorship and the relationship between female mentors and their mentees
  - Short version – by breaking down the barriers between faculty and students, the societally imposed hierarchical structure of the relationship, we can gain a deeper mentoring relationship, benefitting both the mentor and mentee.
- I also grabbed a flyer on critical race theory, so I could use some of that here too.

### **Research Without Method in Post-Qualitative Inquiry**

Notes:

- Un-training qualitative researchers
  - Post-modern theories, and post-modern qualitative
  - Post-structuralism doesn't mesh with standard methods
  - To privilege thought without method
  - Everything we do is normed by theory
- New methods come out of floods of new data
  - Method is confining and constraining
  - The investment in a method is the need for an origin – the method quiets the rumbling of the event itself
  - Digital data is really causing this too
- Concept as, or instead of, method
  - Thinking without method
  - “difference in repetition”.

- We could be outside of method – Deleuze
- “The encounter” is something we randomly run into that we don’t try to understand using standard methods
- How do we stay aware of the “outside of method”?
- Deleuze calls something “athleticism”
  - “a swimming champ that doesn’t know how to swim”
  - “Necessary detours to reveal the life in things”
- The problem with conventional method is that it wants to contain information
  - You have to, conversely, allow the data to exist in all of its’ messiness
  - Divination instead of analysis
    - A mode of encounter with events
    - The relationship between the pure events and the actual bodies (not reduced)
    - Coding makes you a live conduit between actual things and live concepts
      - This might be like divination?
    - We need to leave ourselves open to encounter
- Minor inquiry
  - How is a minor inquiry different from a major language?
  - What does this tell us about traditional social science inquiry (a language)?
  - Major languages (methods) are hegemonic, thereby enforcing sameness
  - Ex – a refusal to assume that researchers can know what someone means when they tell you about it
  - Rethinking what constitutes voice in a minor inquiry – moving away from the individual to the collective
- Coming to a new empiricism

### **Uses of Simulation - Paper Presentations**

- An Investigation of Professionalism Reflected by Student Comments on Formative Virtual Patient Encounters

- Developing the Simulation-Based Assessment Task for Aviation English: An Evidence-Centered Design
- Knowledge Accessed and Used by Nursing Students During a High-Fidelity Patient Simulator Experience

Relationship to EM Discipline: While the papers presented in the session did not relate to emergency management per se (medical and military education) the session introduced AERA Division I - Education in the Professions. Division I is a potential home for emergency management education. The sessions covered the use of simulations to teach and assess key concepts in medical and military education. The concepts of virtual interfaces for student learning is a potential avenue to enhance emergency management education.

- The Accreditation and Certifications Sessions were broad, covering global reforms, market drivers, and professional growth. Competition is striking educational institutions at all levels, especially higher education, with financial crunches and students becoming more selective. Scotland, Norway, Australia, Israel, and the US presented outstanding information, insight, and published research: Accreditation of institutions and programs are nationwide in Scotland and everything is based on specific standards based on continuing leaning enactment of professional standards if harder standard of accountability, such as Bell's Framework, used to enable professional updates, improving profession and nation's safety challenging or de-professionalizing of professions.
- Assessment and Accountability in Teacher Education Systems: Four Nations, Four Cases, teacher education in Scotland, accountability in teach education in Norway, including a case of mistrust and one of trust, understanding policy to turn knowledge into action for teacher educators, an Australian Perspective, as well as framing accountability in teacher education.
  - The most outstanding presentation of the conference for me was the one on Norway's case study in accountability. Norway has 5 million total population and is 8th in spending on education globally. They can compete with other countries in the education market, because of their strict adherence to standards and accreditation, program by program. Colleges are merging with Universities to become more competitive and they see this as a global wave. Professors all have PhDs and school teachers all have Master's degree. All teaching is based on research, with a turn on practice provided. Content is pedagogical and structured around knowledge, control and autonomy, and intelligent accountability and trust (NOKUT).
  - The most significant European motion for higher education throughout Europe is the Bologna process from 199 which is a series of meeting and agreements between 29 European countries to ensure comparability in the standards and quality of higher education qualifications. This process is grounded in the Sorbonne Conference and declaration from 1998. Today the official signatory countries are 47, and the initiatives and agreements developed have truly changed higher education I the member countries.

- They developed a three-cycle circle of higher education, called 3+2+3. The first cycle is the bachelor's degree consists of 180-240 transfer credit system, 120 credits for the second cycle which is the master's degree; and in 2003, the third cycle, the doctorate, was added. They proceeded to develop a European credit transfer system for study points, acknowledged by all member states, simplifying mobility and European accreditation of degrees. This discussion reminded me that Indiana has a higher education program in emergency management, with annual meetings, and the result has been to provide credit in any course in emergency management at any institution of higher education in Indiana at any other institution in the state, public or private.
- European Union also developed a framework for quality assurance systems which includes internal, external and recently also cross national quality assurance activities.
- Then, Australia presented and its population is 24 million:
  1. Historically, 1850 to 1920, educational framework was apprenticeship;
  2. 1920 -1980, the focus was craft, mostly through training colleges;
  3. 1980 – 2000, professionalization was the new emphasis.
  4. Since 2000, standardization is based on strong accountability, accreditation is the emphasis, so that professionals are prepared from the start. Little to no financial or professional recognition of the quality of work done to build professionalism and capability, a little surprising, but is certainly a challenge.
- Leadership Development Across the Leadership Pipeline, April 27, 12 p.m., examined ethical drift in educational leadership and the role of moral literacy. A top recommendation on the mentoring for aspiring assistant principals was the focus. Building efforts toward professional competence in education leadership should start long before the person is in primetime responsibility. One of the presentations was a comparative study of two professional schools, and the more relevant experience and independence given to the student and the young professional educator, the more effective later during service. A presentation called “Through the Looking Glass” compared superintendent’s preferred characteristics for principals, to educational leadership/constituent council and Texas principal standards. Superintendents preferred principals who most resembled themselves. Emergency management has some of that proclivity as well, making diversity in leadership a challenge in the short term and even in the long term.
  - Uses of simulation: an investigation of professionalism reflected by student comments on formative virtual patient encounters, developing the simulation-based assessment task for aviation English, knowledge accessed and used by nursing students during a high-fidelity patient simulator experience, stop! All in the name of safety
- Maximizing Knowledge: Utilizing the Interplay of Rigor, Evidence, Culture, and Achievement to inform Systems of High-Stakes Accountability, examining college and

career readiness produced by start-up charter and charter system schools, the impact of high stakes accountability initiatives on principal and teacher behavior, rater certification standards, and high stakes testing and its influence on teacher self-efficacy and job related stress

- Program Evaluation with a Purpose: creating equal opportunities for learning in schools, evaluating public Montessori education in South Carolina, an experimental evaluation of Holocaust Museum, public school education and therapeutic support for students with emotional and behavioral disorders, examining the effects of a professional learning community initiative on school and district teacher networks using social network, how teacher practices illuminate differences in program impact in biology and humanities studies, and impacts of ramp-up to readiness after one year of implementation
- Community-Based Field Experiences for Preservice Teachers, including the interdisciplinary process more holistic than traditional classroom, asking who are the real stakeholders to community improvement, connections to community improvement, active experimentation, direct play vs. direct instruction, emergent professionalism.
- Science and Mathematics Education in the Context of Culturally Relevant Practice, qualitative and quantitative, teach autonomy and district expectations of culturally responsive pedagogy in an urban district, cultivating pedagogy in a 7th grade science classroom, culturally inclusive science teaching for promoting equal educational opportunities.
- Educator Identity, Preparation, and Assessment: Framing Teachers as Social Actors, including, behind the curtain, performative pedagogy and social justice teaching identity, storying a social drama: how discourse and practice prevent transformation through culturally relevant pedagogy, what happens in praxis, stays in praxis, special theories for studying high stakes teacher tests, and pedagogical implications of teachers' experience in book clubs.
- Implications of Learning Theory for Instruction, such as improving procedural teaching by understanding features association with cognitive load, using the teaching of how to conduct colonoscopies, which showed effectiveness of instructing teacher training and patient toleration, fatigue, order of the day.
- Preparing Preservice Teachers to Teach Mathematics and Science to English Language Learners, reflecting content competence, reflective approaches, cognitive self-image, behavior propensity, perceived acceptance, developing a practice-grounded understanding of academic language, an investigation of preservice science teachers.

## **Friday, April 28**

### **Differences Between Online and Classroom Teaching and Other Comparisons - Paper Presentations**

- Online Learning in the Community Colleges of the State University of New York: Initial Analysis of Differences Between Classroom and Online Learners
- Comparing Face-to-Face and Online Discussions: Similarities and Differences in Facilitation Strategies and Problem Space Coverage
- College Faculty's Readiness for OpenCourseWare (OCW) in Experienced and Unexperienced Groups: A Comparative Study
- Online Versus Face-to-Face Course Outcomes: Controlling for Relevant Student Characteristics and Specific Course Taken
- Examining Students' Motivation, Technology Acceptance, Satisfaction, and Continuance Intention to Use K-MOOC

Relationship to EM Discipline: The session did not directly relate to concepts in emergency management, but covered issues related to the development and delivery of online education. The several papers covered aspects from student success and retention to issues with MOOCs and faculty readiness for online instruction. A key finding important for EM programs was the lack of significant difference in attrition and outcomes for online versus face-to-face classes. Another key outcome from the studies was the lack of significant difference in discourse and questioning in the online and face to face environment.

### **Accreditation Implementing Assessments**

The Accreditation and Certifications Sessions were broad, covering global reforms, market drivers, and professional growth. Competition is striking educational institutions at all levels, especially higher education, with financial crunches and students becoming more selective. Scotland, Norway, Australia, Israel, and the US presented outstanding information, insight, and published research:

- Accreditation of institutions and programs are nationwide in Scotland and everything is based on specific standards based on continuing learning enactment of professional standards if harder standard of accountability, such as Bell's Framework, used to enable professional updates, improving profession and nation's safety challenging or de-professionalizing of professions.
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  4. Since 2000, standardization is based on strong accountability, accreditation is the emphasis, so that professionals are prepared from the start. Little to no financial or professional recognition of the quality of work done to build professionalism and capability, a little surprising, but is certainly a challenge.
- Accreditation: A Framework for Sociopolitical Actions on Socio-scientific Problems: International Perspectives, realizing that actions are not predictable, ways in which Science Education promotes the well-being of Individuals, subjects, and environments, using dialectic generic press, as well as student teachers, social and economic disparities,

and a discussion game, science and technology education promoting well-being for individuals, societies, and environments in the era of global education

- Boston College Professor discussed US education, saying that we are in a 40-year period is the era of accountability, focusing on professional accreditations standards and policy problems. It is an era of standards and outcomes. Many discussions regarding being highly qualified (1998-2007) vs. being highly effective (2008-2017). The former includes reporting and regulations, like No Child Left Behind. The latter is Race to the Top. Shift to knowledge society, reporting for a new economy, certifications, accountability. NCATE reflects changes from inputs to outcomes, in measurements. NCTQ is an alternative accountability and injects a certain amount of uncertainty, depending on President and Secretary of Education. We spend \$9million/year on education at the national level. Education was originally viewed as common good and that has changed somewhat as it is now viewed more as a commodity. In that case, students can choose from among products, after evaluating professors, programs, placement success, and scholarships, as well as quality of campus life.
- Meanwhile, accreditation, standards, high stakes globalization, accountability, privatization, centralization, regulatory entangled connections impact every educator and professional across the globe. Political tensions rise among all professionals, educators, and students. “Fusion cuisine vs. burning pan.” 14 states have CAEP regulations.
- Several of the accountability sessions’ presentations touched on and discussed at length the uses of the traditional, P.I.E. test for determining prioritization, which answers the question ‘where to test first?’ This formula originates with potential, importance, and ease, an excellent way to measure in advance of decision making. With potential, evaluating future efforts for schools. As an example of application, we can examine which its webpages to test for ways to improve by asking which pages have the most potential, which ones have the most importance (which ones have the highest volume and the costliest traffic), and which ones could be improved with the most ease (the degree of difficulty or technical difficulty in implementing), enabling those taking the least technical implementation and face the least political barriers. The less time and resources needed to invest for same return, the better. This test works for technology evaluations for EM and for IHE. Application of the PIE test is used by principals to assess teachers.
- Questions used for professional assessments of teachers often asked in admission interviews are:
  1. What does it mean to be a member of this profession?
  2. What do you expect of yourself?
  3. What do you like best about your profession?
  4. What do you need to do to meet your expectations of yourself and your profession’s expectations?

5. Are there any disciplinary or remediation efforts needed?

- The curriculum also has professionalism components, moral reasoning, team-based learning, as well as situational learning theory applications.
- Learning depends on “access” to model professionals, including “lived experiences” and communities of practice, providing legitimate peripheral participation. All influences teaching, learning, curriculum development, faculty development. Study flow typical steps are: design, pilot, refine, analysis, and plan.
- Topics used in articles include faculty development, professional educational experience, professional identification, formation, and transitions. Research agendas are descriptive – what is done? Justification – does it work? Why? Clarification – why or how does it work?
- Design, development, implementation in virtual Community of Practice provides flexibility in the academic environment, including classification of educational studies:
  1. Descriptive – what is done?
  2. Justification – does it work?
  3. Clarification – why, how does it work? Conceptual framework, gaps, current experience, evidence to fill gaps?
- Wenger (2013) was quoted as saying “We step on each other’s toes, when we should be standing on each other’s shoulders.”

### **Pedagogy of Heart, Being, and (Non) Action**

Emergency Management strives to understand causality, which is critical in understanding the social construction of risk, and how to move forward. Such inquiry and action is inherently local and contextualized through deep understanding of relevant theory. Working to achieve this level of understanding with a local community requires relationship and understanding how to work together. This valuable session explored ways to teach from a position of “who you are” in passing on ways of engagement to bring about change. Learning from a holistic perspective of knowledge, being and ethics is essential. Several key insights:

- To obtain knowledge, more... to obtain wisdom, less. Better performance may require a less crowded curriculum that also engenders continual learning.
- Self and society are in tension, but also complementary (Elinor Ostrom’s 2009 Nobel Prize in economics explores this tension brilliantly and has application)
- Diversity when accepted brings systematic health

## Teaching, Learning, and Pedagogy

Notes:

- Not much out there on rigorous design of collaborative learning and critical thinking
  - Most measures of critical thinking is self-reported, and those measures are terrible (0.1 correlations with actual)
  - Collaborative learning and diversity
  - Collaborative learning – taught each other, encouraged study groups outside of class, 1 or more study groups outside of class, and participation in group projects outside of class (1 inside class, 3 outside class).
  - White, low ACT, gains in critical thinking via collaborative learning
  - That said, collaborative learning didn't affect critical thinking overall
  - Heterogeneity is what develops collaborative learning and critical thinking – randomness is a good way to pair people to this point.
  - Idea – asking students to write essay questions for an exam
- Training government at this university – working with adult learners. They're in these classes because of their job. This place has lawyers teaching (without teaching on pedagogy and that sort of thing).
  - Exploratory case study – class where a prof won a teaching award.
  - Certification program for clerks
  - Used 7 principles of course design
  - Did classroom observations for instances of when those 7 principles were occurring
  - Then did focus group with students afterward to triangulate
  - Interview with instructor
  - Q – did you do a content analysis of materials?
  - Relevancy, expectations, and actions – themes
  - Relevancy – relevant to what they do.
  - Best way to do that is via conversation
  - Expectations – what are we going to do in this class?
- [www.21centurylit.org](http://www.21centurylit.org)

## **Crossing Boundaries and Increasing Impact: Lessons From Successful Research-Practice Partnerships - Poster Session**

Relationship to EM Discipline: The session was a series of short presentations (5 minutes) by the creators of each poster. Each poster detailed a research-practice partnership. Due to the sheer number of posters the presentation were not in-depth enough to provide clear links to the EM discipline. One of the key areas in need of development in the EM discipline is research-practice partnerships. The partnerships detailed ranged from local school districts and universities, state-level departments of education and universities, and non-profits and universities.

## **Rethinking Policy Approaches: Go Big or Go Home**

There was acknowledgement of a very basic understanding of policy processes in higher education and the need for widespread improvement in “policy literacy”. There is also a fundamental tension whether to go big now vs sustainable collaborative effort. Research-practice partnerships are seen as critical. The development of shared theoretical and empirical understanding of practice is prerequisite. Co-construction with a range of stakeholders engaged may add burdens to the scaling process but be more likely to succeed. Solid methodological approaches should be agreed. Unpredictable structures may be interacting with unintended consequences. This points to the need for systems thinking.

## **Assessing Science and Math Curriculum Design**

An Activist Science Teacher: “Teaching Against Grain:” by University of Toronto Professor Larry Bencze was the highlight of this panel with much relevance to emergency management. His emphasis was empowering students to act and still feel safe, while not recreating a working class of professionals. The goal is to convey a feeling to students that “I can do this in real life,” including emergency managers, increasing disasters, pipelines of environmental projects as another related example, changing educational reality. There is much evidence an, he says for supporting contentions that school science systems prioritize teacher-led teaching of many “products,” including laws, theories, and inventions of fields of science and technology. He believes that such “products education” often compromises students’ opportunities for education in other important learning domains, for example, skills and S&T. Often he says, such instruction is relatively teacher-directed and closed-ended, with teachers influencing students’ topics, procedure, ensuring conclusions match those of the mainstream S&T. Such teacher control, he says, provide students with useful information, while largely disempowers students, often limiting the extent to which they may self-direct investigations, experiments, studies, with many possible conclusions, learn about harms to societies and environments linked to influences of powerful people, corporations, and groups in field of science and technology, where they perceive harms in these relationships or implement their action plan to try to bring about a better world.

## **Self-Study Research in a Digital Age**

References back to Peter Senge, the “learning organization” (spoken of in general terms) and associated double-looped learning. Established self-study practices that HiEd relies on for continual improvement do not fit well in on-line or hybrid environments and require

modification. The session focus on access and equity issues. See La Boskey's 2004 criteria and Monica Taylor on self-study.

### **Massive Online Open Courses as a Tool to Improve Instruction and Increase Equality in Education**

Relationship to EM Discipline: The session focused on the design and development of MOOC courses. It provided an overview of MOOC issues. There was no direct link to emergency management, but defined issues to be wary of for MOOC development.

### **Work/Think/Play in Post-Qualitative Inquiry**

Notes:

- Writing and dance – both reliant on technique.
  - How is practice and technique (discipline) embodied in our writing?
- Engaging loselessness in post-qual – how to live theory?
  - Our value is linked to our ability to be called to order at the university
  - Criteria for relevance and what's useful in a discipline is evolving
  - Take on things that aren't thought as useful and see if they are...
  - St. Pierre – pick up texts outside your discipline – like philosophy
  - Ex – reading philosophy material to see how it shifts/aligns with your world view.
- Work and play are often viewed as mutually exclusive
  - With the former an obligation, and the latter an indulgence
  - How do we take play seriously?
  - Old methods are work. Trapped in the past
  - Philosophy as method.
- Laziness in post-qual inquiry
  - If we can't quantify the action, then it's not recognized by the academy
  - Laziness – broader, behind the scene actions done. Responses to capitalist assumptions of value
  - Can laziness provide a vehicle for post-qual inquiry?

## **Designing Technology-mediated, Constructionist, and Open Learning**

This session discussed technical integration as a sociocultural process. Student engagement and co-design of learning environments are seen as ways forward. Other sessions confirmed this approach. Human centered design and low-fidelity prototyping were discussed as ways used in other fields to move forward in digital environments. Bryan Lawson's work on design was considered particularly helpful. Also see the journals: Issues in Teacher Education, International Journal of Designs for Learning, British Journal of Educational Technology, Canvas.net

## **Productive Methodological Tensions: Intervening Through Creativity, Collaboration, and Critique**

Notes:

- Photogeny – the production of images.
  - Pics tell us stuff and it's important to interpret them
- Living theory – movement toward not deliverables but potential creativity

## **Putting Theory to Work: Social justice, the new materialisms and post humanism**

This session explored the teaching of ethics in the age of the Anthropocene. The reality of the Anthropocene is unsettling and has massive implications, particularly emergency management higher education. How technology is changing what it is to be human and the associated ethics. Prominent in this inquiry is the rise of the system and the need for systems thinking in addressing wicked problems. Also explored is the use of process philosophy with long term shifts. See David Cole from West Sydney University on multi-literacies and the work of Stefan Herbrechter from Coventry University. See also Whitehead on the concepts of concrescence and prehensions, as well as process philosophy with its long term shifts. Of interest also is UNESCO's Global Citizen Education.

## **Subjectivity and Reflexivity in Qualitative Research**

Notes:

- We know only through vision. Positivism.
  - De-centering the subject
  - Life history of gay men in phoenix – want to use it to create a sketch instead of traditional coding
  - “grounded theory is too bounding” lol
  - Words can be inadequate. Language cannot fully capture the self.
  - Verbal sketches instead. Poetry.

- Songwriting in qual analysis
  - When composing lyrics, italicize in-vivo spots
  - Songwriting makes you really focus on verse
  - Music is political anyway
- Site-seeing
  - The purpose of this paper is to examine and offer “place -reflexivity” as a methodological tool for engaging in qualitative research. We draw on conceptualizations of site, place, field and context from sociological and anthropological disciplines (Scott, 1989; Amit, 2003) and concepts of place-making from urban planning and community engagement (Altman & Low, 2012), and apply it towards purposes of qualitative inquiry. We problematize sites and draw attention to the need to centralize and purposefully examine sites in qualitative research. We draw on examples from two projects to analyze and foreground sites in qualitative research. We adapted Ulmer’s (1991, 1994) CATTt framework for analysis. Our findings offer several components of place-reflexivity that can be utilized by qualitative researchers.

### **Chaos and Complexity SIG**

Of note: [Complex Systems Society](http://cssociety.org/about-us), Cancun, September 17-22 (URL: <http://cssociety.org/about-us>)

### **Critical Perspectives on Digital Tools in Qualitative Research**

Notes:

- Credible qualitative analysis
  - Theory bits – how do you do analysis and not focus on specific bits?
  - The danger of theory bits is we start to narrow our focus
  - There could be multiple understandings found in quotes
  - How do we deal with evidence?
  - Qualitative software – dedoose
  - Can explore things that we didn’t see by using visual tools
  - 5 strategies:
    1. Include a statement about the difficulty of sorting it out

2. A great quote is one source of evidence
  3. Advances in visualization
  4. Be clear about using language
  5. Member-check, engage the other, etc.
- Objectivity and first-person-perspective video (POV cameras)
    - 1<sup>st</sup> person changes who frames the video
    - Abstract - Drawing on theories of knowledge production offered by Science and Technology Studies (STS), this paper critically examines one recent data collection strategy that has gained purchase in the science of learning: first person perspective video. Learning phenomena as diverse as “epistemic stance,” “learning on the move,” and “computer mediated learning” have been explored using these new videographic technologies that put the production of video data in the hands (and on the bodies) of participants, who are often young children. Positioning young children as data collection instruments has ethical and epistemological implications. This paper attends to notions of “objectivity” and to how these new video production techniques reconfigure learners and the science that studies them.
    - Turns them into cyborgs
    - How does strapping a camera on someone’s head/chest change the way they’re acting?
  - Digital diaries
    - Getting students to pull out a phone and make a digital diary off of a prompt.
    - Mixed methods study
    - Susan Buffet Program
    - Interviews – 3x a semester
    - In between interviews – questions via digital diaries – 8-10 a semester, then a little less every year for 3 years.
    - Lessons learned –
      - Gender balance – maybe diary is gendered? Journals? Video blogging? Diary might be the issue.
      - Send them structured prompts. Open-ended doesn’t work.
      - Can’t probe – they pick what’s important

- Interesting to see where they choose to do the videos
  - They personalize it to the researcher
  - Opening the data can be a challenge, given how the tech changes quickly.
  - Might be cool to send the prompts via video as well.
  - They can use videos to clarify quant findings
- Accreditation: A Framework for Sociopolitical Actions on Socio-scientific Problems: International Perspectives, realizing that actions are not predictable, ways in which Science Education promotes the well-being of Individuals, subjects, and environments, using dialectic generic press, as well as student teachers, social and economic disparities, and a discussion game, science and technology education promoting well-being for individuals, societies, and environments in the era of global education
    - Boston College Professor discussed US education, saying that we are in a 40-year period is the era of accountability, focusing on professional accreditations standards and policy problems. It is an era of standards and outcomes. Many discussions regarding being highly qualified (1998-2007) vs. being highly effective (2008-2017). The former includes reporting and regulations, like No Child Left Behind. The latter is Race to the Top. Shift to knowledge society, reporting for a new economy, certifications, accountability. NCATE reflects changes from inputs to outcomes, in measurements. NCTQ is an alternative accountability and injects a certain amount of uncertainty, depending on President and Secretary of Education. We spend \$9million/year on education at the national level. Education was originally viewed as common good and that has changed somewhat as it is now viewed more as a commodity. In that case, students can choose from among products, after evaluating professors, programs, placement success, and scholarships, as well as quality of campus life.
    - Meanwhile, accreditation, standards, high stakes globalization, accountability, privatization, centralization, regulatory entangled connections impact every educator and professional across the globe. Political tensions rise among all professionals, educators, and students. “Fusion cuisine vs. burning pan.”
    - 14 states have CAEP regulations.
    - Several of the accountability sessions’ presentations touched on and discussed at length the uses of the traditional, P.I.E. test for determining prioritization, which answers the question ‘where to test first?’ This formula originates with potential, importance, and ease, an excellent way to measure in advance of decision making. With potential, evaluating future efforts for schools. As an example of application, we can examine which its webpages to test for ways to improve by asking which pages have the most potential, which ones have the most importance (which ones have the highest volume and the costliest traffic), and which ones could be improved with the most ease (the degree of difficulty or technical difficulty in implementing), enabling

those taking the least technical implementation and face the least political barriers. The less time and resources needed to invest for same return, the better. This test works for technology evaluations for EM and for IHE. Application of the PIE test is used by principals to assess teachers.

- Questions used for professional assessments of teachers often asked in admission interviews are:
  1. What does it mean to be a member of this profession?
  2. What do you expect of yourself?
  3. What do you like best about your profession?
  4. What do you need to do to meet your expectations of yourself and your profession's expectations?
  5. Are there any disciplinary or remediation efforts needed?
- The curriculum also has professionalism components, moral reasoning, team-based learning, as well as situational learning theory applications.
- Learning depends on “access” to model professionals, including “lived experiences” and communities of practice, providing legitimate peripheral participation. All influences teaching, learning, curriculum development, faculty development. Study flow typical steps are: design, pilot, refine, analysis, and plan.
- Topics used in articles include faculty development, professional educational experience, professional identification, formation, and transitions. Research agendas are descriptive –what is done? Justification – does it work? Why? Clarification – why or how does it work?
- Design, development, implementation in virtual Community of Practice provides flexibility in the academic environment, including classification of educational studies:
  1. Descriptive – what is done?
  2. Justification – does it work?
  3. Clarification – why, how does it work? Conceptual framework, gaps, current experience, evidence to fill gaps?
- Wenger (2013) was quoted as saying “We step on each other's toes, when we should be standing on each other's shoulders.”

**Saturday, April 29**

**Advancing the Methodology of Mixed-Methods Research**

Notes:

- Burke Johnson MMIRA.org – mixed methods organization
  - Illari, P. - “Causality” book this guy really liked
  - Pluralistic theory of causation
  - Causality has been explored a bit, but not a ton.
  - There isn’t “one” theory of causation. Multiple and mixed logic
  - Developing powerful “causal mosaics” of each project on a study-by-study basis. There isn’t just one.
  - Qual is interested in specific, time-bound causation - particular times, locations, groups, etc. (transferability)
  - Instead of binaries, use a “both, and” logic
  - Causal description – we’re not sure about underlying mechanisms, but x causes y
  - Causal explanation – x causes y, and we can see all the mechanisms.
  - There’s a handout associated with this one as well
- Classic mixed methods instrument development design
  - Using multi-level theories to understand multi-level models
  - “are the strands investigating the structure of the system as a whole, at levels, or between levels? Do they integrate downstream to give us a better understanding of the whole structure or how the levels work together?”
- International journal of multiple research approaches (just resurrected?)
  - “initiation design” – quant data reveals no sig impact, but qual data tells a different story.
  - Incremental theorizing – refining existing theory
  - Rupture theorizing – challenges conventional wisdom or develop new theories or measures

- You don't necessarily have to reconcile different data sources that conflict, they might just provide another angle.
- You could ask participants to reconcile for you! Member checking
- Ppt shared
  - Pragmatism design

### **Mentoring Faculty in Academia (Posters)**

These poster sessions offered many interesting findings and insights about mentoring faculty. I feel this topic is particularly important for emergency management as we continue to develop and grow the academic discipline.

- *A Quantitative Study of the Mentoring Needs of Contingent Faculty.* According to the authors, the representation of contingent faculty in higher education has become quite prevalent as a result of changes in the staffing practices in academia. This study found a significantly higher need for career-related mentoring functions for this faculty category compared to the other groups.
- *Evaluating a New Faculty Mentoring Program: An Application of the Context-Input-Process-Product Model.* Given increasing expectations for scholarly productivity and teaching effectiveness, universities are more readily recognizing the importance of high-quality mentoring for early career faculty. In this study, researchers applied the Context-Input-Process-Product (CIPP) model to evaluate and inform efforts to improve the faculty mentoring program at a research-intensive university. Using an explorative approach, researchers administered an online survey to mentees and mentors to better understand their experiences in the program. Results warranted three major themes including the: (a) importance of building mutual relationships; (b) personal and professional benefits of mentoring; and (c) value of networking and collaboration.

**These research projects highlighted the importance of mentoring for new and early career faculty, emphasizing the value of mutual relationships, support for professional and personal development, and networking and collaboration opportunities.**

## **Multicultural Roundtable**

Notes:

- Survey results were for high school level. Migrated students used social media to create a sense of community.
- Social construction and redefinition of scaling – local, regional, national, transnational, etc.
- Use of social media for emotional support, shared experiences, etc.
- Feel connected across countries and space.

I left this session because it was primarily focused on high school level and use of social media for identity.

## **Certification: Testing Teachers for Licensure**

Notes:

- The clinical component in teaching, especially preservice, clinical field placement, approximation of practice by Grossman (2009), developing clinical skills, theoretical framework, place-based education enabling students to learn in a place, not about a place. This system encourages partnerships and field trips, not an ongoing activity in public museum school (there are 10 such museum schools in the US). Canada has a school located on a building site for houses. I had an opportunity to discuss New York City's Urban Assembly Emergency Management High School. The University of North Texas has a course in Equitable Teaching in Science, making science and math education culturally relevant. Once students understand one other culture, they can understand all others.
- Students are taught inquiry, exploration, risk, and consequences, active engagement, even fantasy. Data is collected, reading response, professional developmental reflection paper, group art project, course reactions, assessor/observer play. Play was free floating, freedom, inventive, independent, no assessment, collaborative, social dilemmas, cognition quality, decisions to play or not, decisions on who can play, defining play so that it is always positive and build social skills. Intellectual nature of play is crucial for learning improvement. In this context, it is more important to ask, not to tell. Show more than tell, allowing student to get over fear of autonomy, learning how to assess play and getting

## **Noncognitive Factors in Student Success**

Notes:

- Two presentations analyzing the effect of Pell Grants on student success
- Sense of belonging is highly significant to student success – “Academic Mindset”
  - With so many emergency management programs offered solely online, this finding is applicable to our discipline.
  - Females at four year institutions who receive a Pell Grant have higher levels of persistence – take out less loans and work less.
  - Males at four year institutions who receive a Pell Grant have an increase in GPA, but not persistence.

## **Massive Open Online Courses, Flipped Classrooms and Learner Support**

Studies indicate wide acceptance of MOOCs in the developing world, primarily due to increased access to higher education. Efficacy of on-line approaches as opposed to face to face show few differences, when structured appropriately for on-line pedagogy. Accessibility for on-line learners in developing countries is an important consideration in course design. Further, studies indicate at levels beyond MOOCs a perceived lack of empathy from professors in the on-line environment hindered student achievement.

This session featured multiple speakers, no discussant, and plenty of audience participation. The main focus seemed to be on online education, the use of MOOCs, and questions about the rigor and effectiveness of an online doctoral programs generally, though the research presented focused on an online education generally and an online doctorate in education leadership. Studies in this session presented data from multiple institutions, using a wide variety of qualitative methods and sampling techniques. Generally, results were specific to the individual study, but included the following observations in online teaching/learning environments:

- Most online learners seek online degrees because of the flexibility online programs offer, the need to balance work-life obligations, convenience, and the desire for professional advancement
- The perception of the instructor of the multicultural nature of one’s students seems to impact the language used by instructors
- Faculty and family support are key to student success
- Student engagement is enhanced by the intention to finish, peer evaluations, self-evaluations and traditional means of assessment such as exams, papers, etc.
- Student retention is enhanced

- University support (i.e., backend support) of online programs is key but often missing
- Online learners often miss face-to-face aspects of education such as access to instructors and synchronous communications, empathy.
- Icebreaking and orientation sessions are vital to downstream success
- Online programs can be overzealous in promoting an artificially short “time to degree” which online learners believe too literally. That is, taking 4 courses per term, working full time with families is often not sustainable. Hence managing online learner expectations is important to retention and ultimate success.
- Designing online courses should leverage multiple learning strategies.
- MOOCs (massive open online courses) work well for general, or “introduction” type of courses as they are self-paced and utilize open enrollment. Students want credit in the degree program for MOOC completion certificates.
- Student success in MOOCs is directly tied to number of videos watched and posts.

### **Emerging Dialogues in Assessment - Roundtable Discussions**

- Using Servant Leadership to Reframe Cultures of Assessment
- What an Idea! Improving Feedback and Developing Effective Assessment for Higher Education

Relationship to EM Discipline: Papers presented in this session focused on the role of assessment in higher education programs. While not directly related to the content of emergency management programs, the session focused on area of critical importance for the administration of all academic programs. The most critical aspects of the papers involved the notion of leadership in program assessment to include communication of clear goals, vision, and the relationship to individuals involved to the larger process. One paper recommended implementation of a servant-leadership model for assessment. The session provided value too the management of EM programs in higher education.

Notes:

- Servant leadership and assessment using a Delphi study
  - Three types: Shephard, serpa, servant
  - Institutions as servant leadership
    - Pervasive mapping
    - Conceptual skills

- Helping people see the bigger possibility
- Finding value and meaning in work
  - Transcendental spirituality
- Systems thinkers
  - How assessment fits into larger picture
  - Two barriers: authoritarianism and egos
- Negative: external bureaucratic (mandate) requirement, data that goes nowhere.
- Assessment integrated into mission of program, school, university
- Think about assessment at the start of a program if possible for greater success.

### **Critical Perspectives in Leadership Development: Centering Justice: The Role of a University-Based Center in Developing Transformative School Leaders, Internal Revolutions**

Showing the power of professors and teachers to reflect morality and activism, as well as auto-ethnography as a tool for faculty who prepare K-12 leaders and educators, taking a selfie, examining identity in educational leadership preparation programs.

### **Leadership and Professional Development: Principal Retention**

(A fill in session, when other session ended early). In this session, the main presentation was an analysis of retention in the 2010 Principal Cohort, including principals' professional development needs around English language learners. It is always important to rethink leadership styles and this session examined the effect of exposure to collaboration on district-wide leadership within a leadership team, and showed the importance of the context in which professors and teachers practice their work. Another presentation on micro-learning for professional development on the job in this session was helpful to emergency management, sometimes we overemphasize macro aspects.

### **Post-nationalism and Cosmopolitanism: Implications for Leadership and Curriculum Making**

Cosmopolitanism is tending to homogenize curricula. Considerations for the localization of curriculum, under an umbrella of model curriculum that disentangles Western approaches from more progressive and appropriate approach could better prepare citizens for democratic action where they are. Itinerant Curriculum Theory may have application in helping localize curriculum and move away from a Euro-centric view. Related is a rethink of Kant's ideas on cosmopolitanism and Rousseau on negative education. See also the work of Saskia Sassen on expulsions.

## Online Learning

Notes:

### Moore's Interaction Framework

- Virtual lounge was created using realistic scenarios for students to apply concepts. Then discussions are structured with guiding questions
- Learner to Instructor – most significant findings. Students wanted interaction/feedback from the instructor
  - Females wanted more material to explore topics more than the males.
  - Informal virtual lounge more effective with younger students with less online experience.
  - Medium online experience students wanted more forms of media to interact with.
  - Important regular announcements and email reminders, and grading rubrics.
  - Live, synchronous web conferencing sessions were not as important to the students.

What is leadership?

- Difference in leadership in online environment versus face-to-face.
- Netiquette, articulate, quality of text (discourse), tone of text, and frequency (presence) were studied
- GlobalEd2 Project
  - Exemplifies problem based learning theory
    - Multiple disciplines involved in online learning scenario for 14 weeks at a middle school level
    - Online dedicated platform – written communication exchange
    - The country power index was the most significant for evidence of leadership in the online learning platform.

### **Learning From Each Other: Can We Better Achieve Social Goals With Cross-Professional Teams?**

Relationship to EM Discipline: This was an outstanding session also within Division I - Education in the Professions. The session consisted of papers presented on integration between disciplines in military professions, education and interior design. The sessions highlighted issues of communication, education and professionalism. The session was a perfect for the issues of the

emergency management profession. In addition to the numerous examples of issues in coordination between professions. Key applicable aspects of the session included the idea of wicked or complex problems that cross professional boundaries. Of critical importance was the concept of aligning challenges and professional preparation through the use of Cognitive Task Analysis to identify key competencies.

### **Former AERA Presidents Respond to Annual Meeting Theme** (substituted for Historical Perspectives on Critical Internationalization)

Main points:

- Despite rapid advances in theoretical frameworks undergirding academic disciplines, we have not sufficiently localized our understandings to make them relevant to learners,
- Higher Education continues to under-rate the knowledge that comes from practice.
- Values and beliefs are where people begin to shape their understanding. We should refocus on these, as this is where people begin to change their views.
- Connection between disciplines is the new frontier; here we can create the meta-narratives and learn how to communicate complexity.
- In general, Higher Education does not understand how policy operates and needs to get good at it.
- Knowledge comes from action. Therefore, we need to understand the cycles of knowledge generation in action.
- Relevance to practice is criteria for rigor in our programs.
- Seek out those who have been silenced (this idea comes back to the Soka principle that value is created by those who own it)

### **Doctoral Education Across the Disciplines: Roundtable Session 3**

Several research projects were highlighted in this roundtable discussion, including:

- *Self-Efficacy of Generational College Students in Educational Doctoral Programs in Texas.* (This study focused on exploring student self-efficacy levels in terms of academic self-efficacy, research self-efficacy, and social self-efficacy. Analysis of the data concluded that the generational status of a doctoral student does not determine their self-efficacy.)
- *The Modern Education Doctorate: Faculty Perceptions and Program Design in the United Kingdom and the United States.* (This research study aimed to explore the similarities and differences in the EdD and PhD (Education) programs across faculties in the UK and the USA.)

- *The Role of Identities in the Doctor of Nursing Practice Student Experience.* (Throughout the doctoral education journey, students' identities are influenced by their individual networks and academic program culture. Previous studies investigated identity development by focusing on research-based or full-time programs, leaving the professional/practitioner-based programs and students understudied. This student population continues to increase and include previously underrepresented student types. Findings contribute to the understanding of this student population, the communities where they seek support during their degree, and the influence of their personal, student and professional identities.)

This roundtable discussion was of particular interest to me, coming from an institution that offers a doctoral program in emergency management. Of particular value were the insights related to identity development for practitioner-based programs and students who pursue their degrees on a part-time basis.

### **Session on Leadership Development and Teaching: Community-Based Education**

Included learning outside the University Classroom, primarily how principals define and prepare to be instructional leaders, principal facilitation and teacher leadership development, principals' accuracy in evaluating teachers' social and emotional learning effectiveness, the practical impact of legally literate educational leaders, ecological footprint, eco criticism, literacy, ultimately finding meaning.

#### **Uses of simulation**

An investigation of professionalism reflected by student comments on formative virtual patient encounters, developing the simulation-based assessment task for aviation English, knowledge accessed and used by nursing students during a high-fidelity patient simulator experience, stop! All in the name of safety.

#### **Maximizing Knowledge**

Utilizing the Interplay of Rigor, Evidence, Culture, and Achievement to inform Systems of High-Stakes Accountability, examining college and career readiness produced by start-up charter and charter system schools, the impact of high stakes accountability initiatives on principal and teacher behavior, rater certification standards, and high stakes testing and its influence on teacher self-efficacy and job related stress.

#### **Program Evaluation with a Purpose**

Creating equal opportunities for learning in schools, evaluating public Montessori education in South Carolina, an experimental evaluation of Holocaust Museum, public school education and therapeutic support for students with emotional and behavioral disorders, examining the effects of a professional learning community initiative on school and district teacher networks using social network, how teacher practices illuminate differences in program impact in biology and humanities studies, and impacts of ramp-up to readiness after one year of implementation.

## **Community-Based Field Experiences for Pre-service Teachers**

Including the interdisciplinary process more holistic than traditional classroom, asking who are the real stakeholders to community improvement, connections to community improvement, active experimentation, direct play vs. direct instruction, emergent professionalism.

## **Science and Mathematics Education in the Context of Culturally Relevant Practice**

Qualitative and qualitative, teach autonomy and district expectations of culturally responsive pedagogy in an urban district, cultivating pedagogy in a 7th grade science classroom, culturally inclusive science teaching for promoting equal educational opportunities.

## **Educator Identity, Preparation, and Assessment**

Framing Teachers as Social Actors, including, behind the curtain, performative pedagogy and social justice teaching identity, storying a social drama: how discourse and practice prevent transformation through culturally relevant pedagogy, what happen in praxis, stays in praxis, special theories for studying high stakes teacher tests, and pedagogical implications of teachers' experience in book clubs.

## **Implications of Learning Theory for Instruction**

Such as improving procedural teaching by understanding features association with cognitive load, using the teaching of how to conduct colonoscopies, which showed effectiveness of instructing teacher training and patient toleration, fatigue, order of the day.

## **Preparing Pre-service Teachers to Teach Mathematics and Science to English Language Learners**

Reflecting content competence, reflective approaches, cognitive self-image, behavior propensity, perceived acceptance, developing a practice-grounded understanding of academic language, an investigation of pre-service science teachers.

## **Learners' Engagement and Interactions in Online Learning**

This session also primarily involved online education, and used MOOCs as a common exemplar. Many of the studies in this session focused on “student intention to certify”, meaning their intention to complete an online course, specifically a MOOC. Student engagement in online courses is directly enhanced by:

- Intention to certify
- Clear instructions and guidelines
- Number of videos watched.
- Assessment activities such as exams, peer reviews and self-assessments.

- Posts.
- Frequent, and structured email reminders, and encouragements from the instructor.
- Course content replete with “realistic scenarios” such as case studies and other “hands on” activities
- Working collaboratively with peers
- Initial course orientation and ice-breaker activities that introduce learners to each other
- Grading rubrics

Unrelated to student engagement, retention or success includes:

- Discussion boards, forums
- Lack of access to instructors
- Poor course materials (quality was not operationalized, and this was more true for females than males)
- Live or synchronous conferencing.
- Journaling and reflective essays

The final presentation in this session focused on “online leadership”. Frankly I found most of this presentation to be confusing since “leadership” as a dependent variable was not operationalized in a compelling way. The presenter suggested that “leaders” set the tone in conversations, wield influence over followers, act as gatekeepers of information. The presentation set out to identify whether “leadership” was more related to “language quality”, “online activities” or “social background”. The study concluded by identify “language quality” as most important, though immediately stated that this is the least understood variable.

**Conclusions:** The sessions today were each focused on online education, how to structure it, how to support it, how to optimize learner experience and success with it and whether it can be successfully deployed for undergraduate and graduate level coursework and degree programs. For FEMA and with respect to the development of a capable and adequate workforce able to support a national preparedness goal, the main conclusions include:

- Online education is a credible and reliable way to bring complex and dynamic curricula to target populations that have limited access to face to face education options.
- Responsible assessment is possible in online education.
- Much is known about how to optimize learner success in online environments.

- Online delivery allows for both undergraduate and graduate level education, including doctoral education.
- Certification: Testing Teachers for Licensure, April 29, 12:25: The clinical component in teaching, especially preservice, clinical field placement, approximation of practice by Grossman (2009), developing clinical skills, theoretical framework, place-based education enabling students to learn in a place, not about a place. This system encourages partnerships and field trips, not an ongoing activity in public museum school (there are 10 such museum schools in the US). Canada has a school located on a building site for houses. I had an opportunity to discuss New York City's Urban Assembly Emergency Management High School. The University of North Texas has a course in Equitable Teaching in Science, making science and math education culturally relevant. Once students understand one other culture, they can understand all others.
- Students are taught inquiry, exploration, risk, and consequences, active engagement, even fantasy. Data is collected, reading response, professional developmental reflection paper, group art project, course reactions, assessor/observer play. Play was free floating, freedom, inventive, independent, no assessment, collaborative, social dilemmas, cognition quality, decisions to play or not, decisions on who can play, defining play so that it is always positive and build social skills. Intellectual nature of play is crucial for learning improvement. In this context, it is more important to ask, not to tell. Show more than tell, allowing student to get over fear of autonomy, learning how to assess play and getting
- Assessing Science and Math Curriculum Design, April 28, 10:35am. An Activist Science Teacher: "Teaching Against Grain:" by University of Toronto Professor Larry Bencze was the highlight of this panel with much relevance to emergency management. His emphasis was empowering students to act and still feel safe, while not recreating a working class of professionals. The goal is to convey a feeling to students that "I can do this in real life," including emergency managers, increasing disasters, pipelines of environmental projects as another related example, changing educational reality. There is much evidence an, he says for supporting contentions that school science systems prioritize teacher-led teaching of many "products," including laws, theories, and inventions of fields of science and technology. He believes that such "products education" often compromises students' opportunities for education in other important learning domains, for example, skills and S&T. Often he says, such instruction is relatively teacher-directed and closed-ended, with teachers influencing students' topics, procedure, ensuring conclusions match those of the mainstream S&T. Such teacher control, he says, provide students with useful information, while largely disempowers students, often limiting the extent to which they may self-direct investigations, experiments, studies, with many possible conclusions, learn about harms to societies and environments linked to influences of powerful people, corporations, and groups in field of science and technology, where they perceive harms in these relationships or implement their action plan to try to bring about a better world.
- Session on Leadership Development and Teaching: Community-Based Education, April 29, 4:05 p.m.

- Included learning outside the University Classroom, primarily how principals define and prepare to be instructional leaders, principal facilitation and teacher leadership development, principals' accuracy in evaluating teachers' social and emotional learning effectiveness, the practical impact of legally literate educational leaders, ecological footprint, eco criticism, literacy, ultimately finding meaning
- Critical Perspectives in Leadership Development:
  - Centering Justice: The Role of a University-Based Center in Developing Transformative School Leaders, Internal Revolutions, April 29, 12pm: showing the power of professors and teachers to reflect morality and activism, as well as auto-ethnography as a tool for faculty who prepare K-12 leaders and educators, taking a selfie, examining identity in educational leadership preparation programs.
  - Leadership and Professional Development: Principal Retention, April 29, 12pm, a fill in session, when other session ended early. In this session, the main presentation was an analysis of retention in the 2010 Principal Cohort, including principals' professional development needs around English language learners. It is always important to rethink leadership styles and this session examined the effect of exposure to collaboration on district-wide leadership within a leadership team, and showed the importance of the context in which professors and teachers practice their work. Another presentation on micro-learning for professional development on the job in this session was helpful to emergency management, sometimes we overemphasize macro aspects.

## **Sunday, April 30**

### **The Influence of Greg Dimitriadis’s Interdisciplinary Work: Advancing and Transforming Curriculum Studies.**

This session was offered in remembrance of Gregory Dimitriadis, an inspirational scholar of curriculum studies. The panel invited scholars from a wide variety of theoretical traditions to discuss the continuing impact and influence of Gregory Dimitriadis’ interdisciplinary work on their own scholarship and the changing nature of curriculum studies. Each presenter shared how they continue to think about, expand, and act upon curriculum situations “through Greg Dimitriadis’ brilliant ideas, incredible spirit, and admirable life.”

I chose this session because of the interdisciplinary context, curious about the possible insights regarding bridging disciplinary boundaries and facilitating communication. In this example, success in doing so seemed to be clearly a function of Dr. Dimitriadis’ personality and collegiality. The session was both moving and inspiring.

#### Roundtable Discussions

- Error Culture and Corporate Climate: Dealing With Errors and Near Misses at Work
- Learning From and Emotional States in Error Situations in the Workplace: An Expanded Replication Study
- The Learning Potential of Near Misses: The Case of a Chemical Company

Relationship to EM Discipline: This roundtable discussion session was presented by business school scholars and focused on learning from near miss events. The presentations showed business school theories and methods that directly apply to EM research and practice. Key concepts and theories with application include “High Reliability Organizations” (Weick et al., 1999), Phimister’s et al. (2003) stages of identification and management of near misses, namely (1) the identification of an error, (2) error reporting, (3) the causal analysis, and (4) processes of dissemination and resolution, and Zhao et al. (2014) framework for interrelations between emotions, interactions, coping strategies, and learning from errors in the workplace. These theories and concepts are directly applicable to the EM discipline and EM research.

### **Perceptions and Reactions: Political Responses to Education Policy**

Using social movement theory and social network theory, these sessions modeled the influence of social networks (i.e., “intermediary organizations, aka IOs”), parents, parent-teacher associations, advocacy groups, etc. in order to analyze the broad effects of education policy on both K-12 and higher education (though less so regarding higher education). In addition, a variety of case study and mixed method (including structured interviews) were used to elicit respondent opinions about the relative level of influence policy, IOs and other networks have on voting behavior.

Generally, results were specific to K-12 education and the notion of education policy that I was thinking of when choosing this session wasn't presented in the studies. Although novel and compelling methodological approaches were used, there were limited conclusions I was able to draw in order to apply to the goal of building a workforce capable of supporting a national preparedness goal.

### **Foucault, Post-foundations and the Complexities of Contemporary Educational Experiences**

This session considered essential notions of problematization and discourse analysis. What knowledge is available at a particular time and how does it become available? How does such knowledge arise and circulate, changing social practices, and institutions? How does this circulation of knowledge change beliefs, values and norms in society?

### **Strategies for Promoting Active Learning**

This was perhaps the most profound "teaching moment" for me. Using mixed methods and subjects from both higher education and K-12 educational environments, researchers analyzed the causal order that maximizes retention, enjoyment and understanding. That is, the traditional pedagogy of first "content presentation" and then "application" was challenged.

Regardless of the level of the learner, K-12 or college student, results were clear that retention, satisfaction and understanding were all optimized when learners investigate on their own, work collaboratively and explore solutions to problems and challenges BEFORE traditional presentation of content.

### **Trends, Challenges, and Opportunities in Higher Education Student Learning Outcomes Assessment**

A culture of data and evidence is shaping much of education. There have been recent shifts from the institution as unit of measurement, then to teachers, and now the shift to students as a unit of measure. Central to this shift are assessment models that get data back to the student. Changes in the nature of work around communication, collaboration and creativity are driving student-centric assessment and there needs to be a match between work demands and university assessment. This shift is particularly relevant for emergency management higher education. It is worth considering the alignment between emerging work demands and our assessment models. Overall, it is worth looking at how well students are performing in the workplace as the primary measure of overall outcomes.

### **Trends, Challenges, and Opportunities in Higher Education Student Learning Outcomes Assessment**

Notes:

- Assessment – professional development and administrative needs.
- Engage students for meaningful data

- Reasons for revisiting skills that are of value
  - Globalization
  - Increased use of IT
  - Higher rates of automation
  - Changes in types of industries
  - Changes in nature of work
- Shifts in nature of work - Communication, collaboration, and creativity
- Shift in industry types and location
  - Employees with technical skills, specialists, and adaptable
- Service – skills in communication, creativity, and cross-cultural competence
- Book – American’s Skill Challenge (Colley, et al)
- Millennials with a BA performed poorly when compared with similarly credentialed peers
- Skills needed: creativity, problem solving, team work, critical thinking, cultural awareness
- Universities should provide opportunities for students for internships, etc.
- Inform students on these needed skills and work with employers on career readiness
- Student-level assessment
  - Traditional, institutional level assessment
  - Courses to learning
  - Changes in education sources – actual student learning
    - Courses at community college
    - Courses at higher education institution
    - Co-curricular experiences
    - Open educational resources (YouTube, Ted Talks, documentaries, google, etc).

- Consider student-level assessment. Also provide data and feedback to students and not simply back to the institution.

### **Online Course Development in Design Cases.**

This session included a variety of presentations highlighting different design approaches and best practices related to online learning.

- *Student-Centered Problem-Based Learning Approach: Redesigning an Online Computer Science Post-baccalaureate Course.* After designing an online Computer Science post-baccalaureate degree program, this study was undertaken to inform the redesign of an introductory computer science course in a student-centered, problem-based learning approach. The research team proposed a unit/weekly learning trajectory, outlining “an ordered network of experiences students encounter through instruction ... moving through successive refinements towards increasingly complex concepts” (Confrey & Maloney, 2010) as they are engaged in the problem-based learning. Over a three-term period, the research team used design-based, iterative examination to refine the implementation of the learning trajectory. Small groups discussed their learning experiences each term, providing directions for improvements. The analysis directed the next iteration, refining the content, problem solving and collaborations in the class.
- *Improving Distance Learning by Linking Interaction Theory to Practice Through a Systemic Interaction Design Framework.* The authors suggest that while distance learning can provide greater access to educational opportunities, the quality of teaching and learning in distance learning continues to be a challenge. This study investigated how interaction supports learning in order to develop an interaction design framework that any educator can use to improve learning at a distance. Interaction has been identified empirically as increasing learner motivation, satisfaction, participation, communication, and achievement. However, the lack of rigorous and usable instructional design guidelines hinders the realization of interaction’s benefits for distance learning. This study employed a newer methodology, design and development research, to create an expert-validated three-phase framework for use by educators to identify instructional design choices that are grounded in interaction theory and research.
- *Happy Hour: A Design Case on Integrating Live Synchronous Web Meetings Into Asynchronous Online Courses.* Most online courses rely solely on asynchronous text-based online communication. This type of communication has affordances and constraints. Commonly cited constraints include the lack of visual cues and the time it takes for conversations to develop. Synchronous forms of communication can address some of these constraints. However, online educators often avoid using synchronous forms of communication in their courses. In this session, the authors reported on their design experiments where they integrated live synchronous web meetings into asynchronous online courses, collected student feedback, and made iterative changes and refinements based on student feedback over time.
- *The Challenges and Successes Distance Learners Face During Hybrid Synchronous Instruction: A Case Study.* This presentation reported on a case study investigating

distance learners participating in graduate-level hybrid synchronous instruction. This research helps inform the design of the hybrid synchronous instruction in which face-to-face and distance learners engage in class sessions. Data were collected using electronic journals, individual interviews, and a focus group. The results of the data analysis provided evidence that in this case, hybrid synchronous instruction can improve the study habits of distance learners. However, the case study results also revealed that there were challenging pedagogical aspects which the distance learners had to overcome during hybrid synchronous instruction. Among such challenges were the interactions, relationships, and communication exchanges between distance learners, their face-to-face counterparts, and the instructor.

- *Hybrid Learning in Higher Education: The Potential of Teaching and Learning With Robot-Mediated Communication.* Blended learning, which combines online and face-to-face pedagogy, is a fast-growing mode of instruction as universities strive for equitable and alternative pathways to course enrollment, retention, and educational attainment. However, challenges to successfully implementing blended instruction are that social presence, or students' ability to project their personal characteristics into the learning space, is reduced with potential negative effects on student engagement, persistence, and academic achievement. This presentation described instructors experimenting with robot-mediated communication (RMC) to address these challenges. Results from a study of RMC at a large public university suggested that it offers advantages over traditionally used video-conferencing, including affordances for fostering students' embodiment in the classroom, their feelings of belonging and trust, and their ability to contribute ideas in authentic ways.

### **Engaging Complex Social and Scientific Issues in Informal Learning Spaces**

This session, again, emphasized K-12 education. It focused on “complex issues” which the authors defined variously as climate change, slavery, incarceration, etc. Using both traditional ethnomethodology and Q-methodology, data was gathered that allowed researchers to better understand how respondents valued aspects of learning, relative to each other (as opposed to a simple rank ordering as with Likert scales).

Results generally convey that teachers prefer to learn from places and experts at a more superficial level than they do when processing new material with other teachers. Further, interdisciplinary challenges (i.e., how to teach climate change, etc) can be managed by using systems thinking and by making the issues relevant to the learner's individual lives.

### **Understanding Access and Student Success in Graduate Education**

Gender in STEM fields – Mentors are integral. Connection with university and across the discipline

- Different experiences across the genders.
- Importance of a social network
  - Access to resources, information, and opportunity

- Diverse set of ties will access different opportunities and resources
- Study limits = 1 year and 1 university
- Applicability to EM – consider creating a mentor program and have faculty run the program with buy in from community partners.
- Mentoring leads to: student success, self-efficiency, retainment, and network development
- Engaged expectations set. Positive attitude and open minded
- Professionalization – no assumption based on gender or ethnicity. No unethical behavior
- Present – ability to meet and answer questions.

#### Sense of Belonging

- Most of the literature is at the undergraduate level and not graduate.
- Maslow (1954) – basic human need
- France et al (2010) sense of belonging – scale with three items – 9 point likert scale
- Bollen and Hoyle (1990)
- Statistically significant results for sense of belonging for graduate students: relationship with faculty, other undergraduate and graduate students, social events, professional development
- No statistical significance difference between gender and minorities/ethnicities

#### Doctoral Attrition

- Lent and Brown (1996) – self direction, self efficiency, and professional goals are the outcome expectations
- Social Cognitive Career Theory (Atadero, Rambo-Hernandez & Balgopal, 2015)
- Socialization
- Negative relationship with advisor
- Sense of isolation
- Others – wrong career path, mental health challenges
- Self-direction factors

- Very strong feelings regarding decision – not passive
- Institutional responsibility for student retention – there is an increasing literature on this.

### **The Application of Systems Thinking in Education**

As a session of the SIG, there are two ways of looking at Systems Thinking in Education. The first looks at how the various elements interact to achieve the mission overall. The second way is to see how students can develop systems views. The latter is of interest, as a systems view of emergency management offers valuable insights into the complex issues we are required to address. Amy Ardell from Chapman University has been working in this new field, following the efficacy of approaches advocated by Capra, Luisi and others. It will be worth paying attention to their systems theories and methodologies. The associated curriculum are well developed and have potential application in higher education. I will follow up with Dr. Ardell.

This was perhaps the most profound “teaching moment” for me. Using mixed methods and subjects from both higher education and K-12 educational environments, researchers analyzed the causal order that maximizes retention, enjoyment and understanding. That is, the traditional pedagogy of first “content presentation” and then “application” was challenged.

Regardless of the level of the learner, K-12 or college student, results were clear that retention, satisfaction and understanding were all optimized when learners investigate on their own, work collaboratively and explore solutions to problems and challenges BEFORE traditional presentation of content.

### **Technology and Media**

The Pareto Principle, or the 80/20 rule, refers to the 19th Century economist who observed that in most fields in life 80% of the production will come from 20% of the actors. This rule however leads to a fundamental misperception regarding the origins of the 20%, many of whom enjoyed a slight advantage which allow them to be favored and developed at the expense of others who might have in the end been better qualified. This slight advantage tends to multiply over time. The lessons for developing technology and media in education follow from this insight. Much of the innovation tends to happen within affinity communities in the 80%, not necessarily at the high end. In these affinity spaces, particularly games, there is strong evidence of collaboration and helping others to learn. Good affinity spaces are distributive, experiential and problem solving. This stands in contrast to education which tends to be a “game manual with no game”. Pay attention to the fundamental differences between legacy organizations and emergent architectures, Also pay attention to accessibility of programs in our field. See Ed Gordon and the Intellect of Competence

### **Using Digital Media to Inform Learning**

- *Video Publishing and Educational Opportunity: Reconceptualizing Pedagogy*. This paper reconceptualized pedagogy “in the visual age that marks 21st century education based on experiences of an international consortium of eight institutions engaged in three inter-related projects: The Association of Visual Pedagogies (AVP), the Video Journal of Education and Pedagogy, and the academic conference AVPC 2016: Visual Pedagogies

and Digital Cultures.” New forms of educational opportunity discussed included pedagogical opportunity, access opportunity, cross-disciplinary opportunity, financial opportunity, research opportunity, social opportunity, and other forms of opportunity through visual means.

- *The Quantified Child Reader: When Early Literacy Becomes Big Data.* This paper conceptually explored an emerging educational platform termed children’s literacy groupware: cloud-based reading management systems that combine digital reading collections with behavior tracking and analysis, communication tools, and reader incentives. The systems enable adult stakeholders to manage the reading activities of dozens of children. The authors analyzed two for-profit app-based systems that provide reading content and instruction for elementary age children in the United States.
- *Misinformed by Algorithm: How Search Engine Results Can Lead to Biased Student Writing.* The public’s primary form of science education is via the medium of search engines, but while the Internet increases the public’s access to scientific information it also increases access to misinformation. The authors of this study posed the following question: In what ways might a Search Engine Result Page, or SERP, interact with cognitive biases to influence a student’s perception about the usefulness of information. Using a population-based survey experiment with sixty participants, this study found that students created biased writing that is dependent on how information is presented in a SERP. The authors argued that when search engines undervalue the importance of diversity in information, students will reflect this bias implicitly in their writing.

**The History of Qualitative Research in Four Generations.** Four generations of qualitative researchers in education discussed the history of the field in this symposium session. These autobiographical/philosophical papers provided a window into the history of qualitative research across fifty plus years of its development in education and provided a view of what the future of post-qualitative work might hold.

- *From Field Biology to Interpretation: Initial Development of Approaches to Ethnography in Qualitative Inquiry.* The first paper tracked the beginnings and development of approaches to ethnography in qualitative inquiry.
- *(Post)Critical Methodologies: The Science Possible After the Critiques.* The second paper looked at feminist and critical theories underlying the various post movements that have characterized the field in the last few decades.
- *Reading Deleuze Too Soon: Post-Qualitative Inquiry.* The third paper discussed how “post” work ruined “conventional humanist qualitative methodology” from the start and launched her development of post-qualitative inquiry that begins with theory and concepts, not with methods.
- *Thinking without Method.* The fourth paper “presented a Foucauldian ‘history of the present’ that moves beyond an imperative to ‘know’ toward the interrogation of unproblematized practices in social research by thinking with theory, not as method, but as ways of acting without a script in post-foundational inquiry.”

Notes:

- *The ethnography as field biologist: Margaret Mead – disciplined subjectivity*
- *Validity: 4 forms of validity – Patti Lather – validity after post-structuralism*
- *St. Pierre: “reading Deleuze too soon...”*
- *How we teach thinking in qual*

## **Curriculum and Academic Programs for Multicultural/Multiethnic Societies**

Intercultural Competency (IC) online versus face-to-face

- Few studies compare IC knowledge, skills, and abilities across the two modes of instruction
- IC Framework (Deardorff, 2006; 2009; Vande Berg, 2016)
- Iceberg concept of culture – looking at deep culture
- Bloom – internalizing behaviors
- Survey study – no significant difference between pre and post tests and mode of teaching.
- Value rubric – AAC&U – intercultural knowledge and competence resource
- Essay – online increase in attitudes, specifically openness
- Include reflection at midway point during the semester to reflect on the pre-test (social desirability)
- Mixed methods was very important in this study.

Learn or Not

- Bronfenbrenner’s bioecological model (1999; 2005)
  - Nested system that influence human development
  - Macro system comprised of predominant cultures, values, and norms
    - Question – used to influence macro level of other theoretical frameworks?
  - LEARN – Literacy Enrichment and Academic Readiness for Newcomers Program – used for migrant or refugee students
  - Ambrogio, Shoemaker, & Watson (1996)

- Banks and Banks (2007) – 4 levels of using multicultural literature across the discipline.
- More students become more segregated in an online learning environment
- Recommended intercompetency certification for all program faculty.
- Interdevelopmental competency inventory and instruments available.

### **A Town Hall Meeting on the Role of AERA as a Research Organization in Socially Challenging Times**

Participants shared their reflections and concerns about the current policy and political environment, and potential impacts on education and educational research.

**Conclusions:** The sessions today focused on influencers of policy and how social network theory can help identify and discern what does and does not impact teaching or education policy. In addition, other sessions focused on how best to combine traditional teaching/lecturing and student-based problem solving and activities to optimize student/learner happiness, engagement and comprehension. For FEMA and with respect to the development of a capable and adequate workforce able to support a national preparedness goal, the main conclusions include:

1. Social network theory and Q-methodology provide methods we can use to identify relative importance of factors that impact EM student success.
2. Policy advocacy is both a local and federal affair. Identifying and then leveraging social networks and IOs can greatly enhance policy advocacy.
3. In professions such as EM and HS, skill acquisition and collaboration skills are critical to professional effectiveness. When designing online curricula in EM, it appears that letting students explore solutions to complex problems before lectures are formally presented will enhance both collaboration skills as well as learning. This lesson is applicable to both face to face education as well as online education.

## Monday, May 1

### **Understanding the Experiences and Socialization of Teaching Assistants**

- *A Symbolic Interactionist Ethnographic Exploration Into How Graduate Students Prepare to Teach for Higher Education.* This 15-month symbolic interactionist ethnographic study examined how graduate students in three interdisciplinary teaching preparation seminars experienced formal teaching preparation for higher education. Key initial results suggested students experienced tension between the brevity and convenience of the seminars with needing greater depth in their learning.
- *Exploring the Socialization Processes of Mathematics Teaching Assistants Into Their Roles as Teachers.* This ethnographic case study used a possible selves (PS) framework to explore and understand the socialization processes mathematics PhD students undergo in their development as teachers, specifically through their roles as teaching assistants (TAs). Preliminary findings suggested that gender and language and native/non-native status influence how TAs experience their roles and expect their future selves to unfold
- *Intersections of Racialized Identity and Teacher Identity: Experiences of Graduate Teaching Assistants of Color.* This study examined racialized teaching experiences of GTAs of color (GTACs) and its impact on teaching self-efficacy. Findings suggested that GTACs' racialized identities are inextricably linked to their teaching identities; positive relationships are critical for supporting GTACs' sense of teaching self-efficacy.
- *Student-Focused Teaching and Deep Learning Conceptions in a Short Mandatory Graduate Teaching Assistant Training Course.* Deep approaches to learning in higher education have been linked to student-focused teaching approaches. This study investigated the impact of a mandatory short graduate teaching assistant (GTA) training course on conceptions and approaches to teaching and learning at a large Asian university.

### **Online Professional Development, Course Design, and Student Orientation**

This poster session sponsored by the Online Teaching and Learning SIG explored a variety of topics related to online professional development approaches, course design, and student orientation.

- *Digital Badges and Differentiated Instruction: Program Evaluation in Supporting Online Professional Development.* This poster examined nine practicing K-12 classroom teachers' learning experiences with an online professional development (OPD) program supported by digital badging through a large public university in the Southeastern United States as a means of evaluating the program's effectiveness.
- *Examining the International Association for K-12 Online Learning (iNACOL) Standards for K-12 Online Course Design.* This poster examined the iNACOL Standards for K-12 Online Course Design

- *Online Orientation: An Effective Approach to Initiating an Online Learning Community.* Building a supportive online learning community is an essential but challenging objective for online distance educators. This poster advocated the purposeful design of community-building activities for newly admitted online students in an Education Leadership Master's degree program. This study presented an online orientation that prepared students to use technology effectively and created a supportive learning community for two cohorts in 2015 and 2016.
- *The Presence-Achievement Relationship: Designing for Equitable Student Outcomes in Blended Space.* This study deconstructed the educational experience in a blended classroom (with both online and face-to-face instruction) in order to test for specific associations between elements of that experience and achievement (final course grade).

### **A Lagniappe** (From Steve Jensen)

As a little bonus, I flew back to Los Angeles with an education research from CSU Northridge who had developed breakthrough strategies for teaching math. We discussed the relevance of his methods to our training challenges, particularly with ICS. In essence, they focus teaching on the problem rather than the rules. The rules are important, but are developed and refined later. As he described, think of a math problem like a journey across LA. We can provide a catalog of rules, but you will forget them and never complete the journey. Alternatively, we can provide a map and some basic parameters, giving you the tools to work out very complex and dynamic problems. This is not to negate the importance of the rules, it is just acknowledging how we make sense of novel problems by first building a framework, then actively using the framework as a scaffold to make sense of the rules as we proceed in solving a problem. This fundamental insight could help in applications of andragogy to ICS learning, which continues to be a challenge. This builds on the insight from other researchers that we are essentially sense-making beings

**Table 1: AERA Sessions Attended**

<b>AERA Session Title</b>	<b>Community POC to learn more</b>
Leadership and Professional Development	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Uses of Simulation	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a> Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
Examinations of Faculty Motivation and Engagement	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Assessment and Accountability, Four Nations, Four Cases	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Framework for Socio-Political Actions: International Perspectives	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Program Evaluation with a Purpose	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Science and Mathematics Education in Context of Culturally Relevant Practice	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Community-Based Field Experience	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Implications of Learning Theory for Instruction	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Teacher Identities and Global Context	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
International Education and Research	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Electronic Assessment Systems	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
Equitable Instruction Across Content Areas	Kay Goss- <a href="mailto:kaygoss@icloud.com">kaygoss@icloud.com</a>
A Closer Look at the Self in Research and Practice	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Critical and Participatory Approaches to Qualitative Research	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Research Without Method in Post-Qualitative Inquiry	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>

<b>AERA Session Title</b>	<b>Community POC to learn more</b>
Teaching, Learning, and Pedagogy	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Work/Think/Play in Post-Qualitative Inquiry	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Productive Methodological Tensions: Intervening Through Creativity, Collaboration, and Critique	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Subjectivity and Reflexivity in Qualitative Research	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Critical Perspectives on Digital Tools in Qualitative Research	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Advancing the Methodology of Mixed-Methods Research	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Mixed-Methods Research and Technology	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Learning From Each Other: Can We Better Achieve Social Goals With Cross-Professional Teams?	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a> Mark Landahl- <a href="mailto:milandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
The Use of Mixed-Methods Research in Different Disciplinary and Methodological Contexts	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Online Course Development as Design Cases	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Advances and Applications in Structural Equation Modeling	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
The History of Qualitative Research in Four Generations	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Teaching and Learning Qualitative Research	Alex Greer- <a href="mailto:Alex.Greer@okstate.edu">Alex.Greer@okstate.edu</a>
Multicultural/Multiethnic Education: Exploring Institutional Support for Student Empowerment and resilience	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a>
Emerging Dialogues in Assessment	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a>

<b>AERA Session Title</b>	<b>Community POC to learn more</b>
	Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
Race, Identity, and Ethnicity	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a>
Students' Perceptions, Outcomes, Online Engagement and Satisfaction	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a>
Trends, Challenges and Opportunities in Higher Education Student Learning Outcomes Assessment	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a> Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a> James Ramsay- <a href="mailto:James.Ramsay@unh.edu">James.Ramsay@unh.edu</a>
Understanding Access and Student Success in Graduate Education	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a>
Curriculum and Academic Programs for Multicultural/Multiethnic Societies	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a>
Noncognitive Factors in Student Success	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a>
Minoritized in the Academy	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a>
Innovation in Student Success	Claire Connolly Knox- <a href="mailto:Claire.Knox@ucf.edu">Claire.Knox@ucf.edu</a>
Soka Studies and Value Creation Curriculum: The Urgency of Non-Western/International/Comparative Curriculum Inquiry	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Epistemological Frontiers: Disrupting Curriculum Theory	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Deweyen Discourses on Democracy	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Managing Complex Systems for Implementation and Scale	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Pedagogy of Heart, Being, and (Non)Action	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Rethinking Policy Approaches: Go Big or Go Home	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Self-Study Research in a Digital Age	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>

<b>AERA Session Title</b>	<b>Community POC to learn more</b>
Designing Technology-mediated, Constructionist, and Open Learning	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Putting Theory to Work: Social justice, the new materialisms and post humanism	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Chaos and Complexity SIG	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Massive Open Online Courses, Flipped Classrooms, and Learner Support	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a> James Ramsay- <a href="mailto:James.Ramsay@unh.edu">James.Ramsay@unh.edu</a>
Post-nationalism and Cosmopolitanism: Implications for Leadership and Curriculum Making	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Former AERA Presidents Respond to Annual Meeting Theme	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
Foucault, Post-foundations and the Complexities of Contemporary Educational Experiences	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a>
The Application of Systems Thinking in Education	Steven Jensen- <a href="mailto:stevenjohnjensen@gmail.com">stevenjohnjensen@gmail.com</a> James Ramsay- <a href="mailto:James.Ramsay@unh.edu">James.Ramsay@unh.edu</a>
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Mentoring Faculty in Academia	Jane Kushma- <a href="mailto:jkushma@jsu.edu">jkushma@jsu.edu</a>
Doctoral Education Across the Disciplines	Jane Kushma- <a href="mailto:jkushma@jsu.edu">jkushma@jsu.edu</a>
The Influence of Greg Dimitriadis's Interdisciplinary Work: Advancing and Transforming Curriculum Studies	Jane Kushma- <a href="mailto:jkushma@jsu.edu">jkushma@jsu.edu</a>
Online Course Development in Design Cases.	Jane Kushma- <a href="mailto:jkushma@jsu.edu">jkushma@jsu.edu</a>
Using Digital Media to Inform Learning	Jane Kushma- <a href="mailto:jkushma@jsu.edu">jkushma@jsu.edu</a>
The History of Qualitative Research in Four Generations	Jane Kushma- <a href="mailto:jkushma@jsu.edu">jkushma@jsu.edu</a>

AERA Session Title	Community POC to learn more
A Town Hall Meeting on the Role of AERA as a Research Organization in Socially Challenging Times	Jane Kushma- <a href="mailto:jkushma@jsu.edu">jkushma@jsu.edu</a>
New Approaches to Critical and Comparative Case Study Methodologies	Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
An Examination of School Policies in Practice	Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
Differences Between Online and Classroom Teaching and Other Comparisons	Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
Crossing Boundaries and Increasing Impact: Lessons From Successful Research-Practice Partnerships	Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
Massive Online Open Courses as a Tool to Improve Instruction and Increase Equality in Education	Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
Using Servant Leadership to Reframe Cultures of Assessment	Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
Learning From Each Other: Can We Better Achieve Social Goals With Cross-Professional Teams?	Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
Error Culture and Corporate Climate: Dealing With Errors and Near Misses at Work	Mark Landahl- <a href="mailto:mlandahl@frederickcountymd.gov">mlandahl@frederickcountymd.gov</a>
Learners' Engagement and Interactions in Online Learning	James Ramsay- <a href="mailto:James.Ramsay@unh.edu">James.Ramsay@unh.edu</a>
Perceptions and Reactions: Political Responses to Education Policy	James Ramsay- <a href="mailto:James.Ramsay@unh.edu">James.Ramsay@unh.edu</a>
Strategies for Promoting Active Learning	James Ramsay- <a href="mailto:James.Ramsay@unh.edu">James.Ramsay@unh.edu</a>
Engaging Complex Social and Scientific Issues in Informal Learning Spaces.	James Ramsay- <a href="mailto:James.Ramsay@unh.edu">James.Ramsay@unh.edu</a>

**APPENDIX III  
DISCIPLINE FOCUS GROUP PLENARY AND BREAKOUT SUMMARY**

**2017 FEMA Higher Education Symposium**

As an effort to convey and extend the experience and dialogue the Discipline Focus Groups began at the American Education Research Association (AERA) meeting in San Antonio, Texas, the group planned both a plenary and breakout session at the 19<sup>th</sup> Annual Emergency Management Higher Education Symposium. The group met a few times prior to the symposium to exchange information and organize presentations. It was determined that a panel session would be best for the plenary and that a panel with an added experiential activity would be ideal for the breakout session.

The plenary would have a single slide that provided pictures of all members of the focus group to convey the breadth of participation, as not everyone was able to attend the symposium. Drs. Jessica Jensen, Clair Knox, Steve Jensen and Ms. Kay Goss took the lead on planning the plenary session. The plenary provided an overview of the elements of an academic discipline and then a historical overview of the specific emergency management discipline dialogue and efforts. They related how disciplines educate and it's important to be reflective in how we educate. They conveyed that the AERA experience was enriching in looking at how other disciplines reflect, experiment and improve on their teaching practice. Further they discussed the connection between the emergency management discipline and other disciplines as well as to the overall National Training and Education System (NTES).

The breakout session was scheduled for one and a half hours and had three objectives they wanted to cover in this session. First, they wanted to share what AERA is and convey what they thought the emergency management academic community could gain from it. Second, they sought to describe prior emergency discipline discussions and efforts and lastly to facilitate an activity to elicit the relationships between emergency management and other academic disciplines. Dr. Jensen started off the session with the background. Drs. Mark Landahl, Steve Jensen, Carol Cwiak and Clair Knox provided their experience and insights on the topic. The session then introduced an activity to brainstorm complementary disciplines to emergency management and discerned thirty-three which are captured in the world cloud below.



These 33 disciplines were written on a poster paper with an open space next to each one to provide room for ranking. Participants were then asked to rank the disciplines they felt most influenced their curricula, research or thinking. The 24 participants were provided with 5 unique dots that denoted their affiliation into five different categories: community college faculty (n=1), undergraduate faculty (n=8), graduate faculty (n=7), student (n=4) and other (n=4). Each participant could distribute their dots on the poster paper as they felt appropriate, therefore a participant could place all of their dots on one discipline or disperse them. Of all the disciplines ranked only one discipline made the top 5 for each affiliation and that was the discipline of sociology. The disciplines of physiology and biology were the only ones that did not receive any ranking dots of the 33 listed. Due to the very small and unequal sample sizes this activity did not provide a rigorous look into the strength of connections, but it did serve as an interesting activity for the group. Unfortunately, the session ran short on time and there was no time to engage in a dialogue to better understand the perspectives and rankings. In the future, it may be valuable to repeat this activity, compare outcomes and capture the resulting conversation.

**APPENDIX IV**  
**NATIONAL PREPAREDNESS GOAL MISSION & CAPABILITIES**  
**CROSS-WALKED WITH RELEVANT ACADEMIC DISCIPLINES\***

\*The following was offered by focus group member Mark Landahl.

At least two lenses are available to examine the relationship between the emergency management discipline and complimentary academic disciplines. The first is a pure academic perspective. In some cases, this takes the path of exclusion. In this it attempts to draw lines between what is and what is not, for the purposes of academic policy and defining academic units within the university setting. As has been explored, there are many issues in defining the discipline. Perhaps of most critical importance is that some programs, that many would identify as core emergency management academic programs, do not see or proffer themselves as emergency management, but as disaster science. While consensus is not necessary, many of the core academic issues of the field itself remain unresolved, making it difficult if not impossible, to examine boundaries and intersections with other academic disciplines.

A few options present for moving forward with this approach. The first option is to conduct a content analysis of course descriptions or syllabi in programs that identify themselves as emergency management. The discipline is then defined by what is being taught, a current state that can serve as a path to a desired state. A second method is a Delphi study of curriculum leaders in the field aimed at defining the discipline by how its leaders define it.

The second, and less popular approach is to examine emergency management and its boundaries based upon current policy and emergency management service delivery. The National Preparedness Goal and associated policies can serve as a framework for this approach. This approach rests on the question: how does what emergency management as a governmental function is expected to deliver trace to academic disciplines? This approach does not validate current policy as an avenue to define the discipline itself, but a framework to trace these goals to knowledge, skills and abilities that define the emergency professional operating within the policy environment. A professional that requires education to be successful, what is the content of this education and what are the disciplinary origins and linkages?

Although it requires much more work and specific analysis, perhaps by use of Cognitive Task Analysis and other methods, to define the discipline by what knowledge, skills and abilities are required to perform the emergency management mission in the given policy space. Table 1 is a rough-cut beginning on using the current policy outcomes to generally map to academic disciplines (of course hampered by the lack of specific definitional aspects of these disciplines). The path forward through this approach is rigorous analysis of policy and the position of emergency manager.

<b>Prevention</b>	<b>Protection</b>	<b>Response</b>	<b>Recovery</b>	<b>Mitigation</b>
The Prevention mission area comprises the capabilities necessary to avoid, prevent or stop a threatened or actual act of terrorism. It is focused on ensuring we are optimally prepared to prevent an imminent terrorist attack within the United States.	The Protection Framework houses “the capabilities necessary to secure the homeland against acts of terrorism and manmade or natural disasters.”	Response comprises “the capabilities necessary to save lives, protect property and the environment, and meet basic human needs after an incident has occurred.”	Recovery comprises “the core capabilities necessary to assist communities affected by an incident to recover effectively.”	Mitigation comprises “the capabilities necessary to reduce the loss of life and property by lessening the impact of disasters.”
<ul style="list-style-type: none"> <li>• Planning</li> <li>• Public Information and Warning</li> <li>• Operational Coordination</li> <li>• Forensics and Attribution</li> <li>• Intelligence and Information Sharing</li> <li>• Interdiction and Disruption</li> <li>• Screening, Search, and Detection</li> </ul>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Public Information and Warning</li> <li>• Operational Coordination</li> <li>• Access Control and Identity Verification</li> <li>• Cybersecurity</li> <li>• Intelligence and Information Sharing</li> <li>• Interdiction and Disruption</li> <li>• Physical Protective Measures</li> <li>• Risk Management for Protection Programs and Activities</li> <li>• Screening, Search, and Detection</li> <li>• Supply Chain Integrity and Security</li> </ul>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Public Information and Warning</li> <li>• Operational Coordination</li> <li>• Critical Transportation</li> <li>• Environmental Response/Health and Safety</li> <li>• Fatality Management Services</li> <li>• Fire Management and Suppression</li> <li>• Logistics and Supply Chain Management</li> <li>• Infrastructure Systems</li> <li>• Mass Care Services</li> <li>• Mass Search and Rescue Operations</li> <li>• On-Scene Security, Protection, and Law Enforcement</li> <li>• Operational Communications</li> <li>• Public Health, Healthcare, and Medical Services</li> <li>• Situational Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Public Information and Warning</li> <li>• Operational Coordination</li> <li>• Economic Recovery</li> <li>• Health and Social Services</li> <li>• Housing</li> <li>• Infrastructure Systems</li> <li>• Natural and Cultural Resources</li> </ul>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Public Information and Warning</li> <li>• Operational Coordination</li> <li>• Community Resilience</li> <li>• Long-Term Vulnerability Reduction</li> <li>• Risk and Disaster Resilience Assessment</li> <li>• Threats and Hazards Identification</li> </ul>
Homeland Security	Homeland Security	Emergency Management	Emergency Management	Engineering
Intelligence Studies	Engineering	Homeland Security	Business	Community Planning
Forensic Science	Cyber Security	Fire Science	Economics	Public Administration
Emergency Management	Computer Science	Environmental Science	Social Work	Political Science
Communications	Intelligence Studies	Occupational Health	Historic Preservation	Emergency Management
Public Administration	Emergency Management	Engineering	Engineering	Environmental Science
Political Science	Public Administration	Public Health	Computer Science	Geography
Engineering	Communications	Public Administration	Environmental Science	Communications
Sociology	Supply Chain Mgmt.	Supply Chain Mgmt.	Public Health	
Criminal Justice	Public Health	Criminal Justice	Occupational Health	
Public Health	Health Physics	Sociology	Public Administration	
Health Physics	Business	Geography	Political Science	
	Sociology	Mortuary Science	Sociology	
	Political Science	Social Work	Communications	
			Community Planning	