A Bridge to Success:

An Analysis of FEMA Higher Education Program Regional Engagement Reports (2017-2019)

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EXECUTIVE SUMMARY

Between 2017 and 2019, the FEMA Higher Education Program organized 10 academic engagement meetings to congregate Emergency Management (EM) stakeholders in each FEMA region and discuss the possible strategies to bridge the gap between academia and practitioners. After the meetings, an academic point of contact completed an after-action report describing the presentations provided by the participants, discussions between EM stakeholders, and suggestions for organizing future engagement meetings.

This research utilizes the method of content analysis to analyze the 10 after-action reports. The researcher develops codes and uses computer software, Atlas.ti, to group similar concepts and ideas together. Results of this analysis demonstrate: 1) developing opportunities for practitioners and researchers to meet and discuss critical issues is helpful, 2) creating a positive environment for collaboration is imperative, and 3) providing resources to EM students in order to prepare them to enter this field is necessary to bridge the gap. Through analysis of these after-action reports, the researcher finds there are three challenges impeding cooperation between researchers and practitioners: 1) the amount of meeting time devoted to individual research/projects rather than potential shared research/projects, 2) the amount of meeting time devoted to individual programs and organizations rather than potential cooperation strategies, and 3) the need to increase the diversity of participants in these engagement meetings.

The researcher concludes this report with some suggestions to engage all EM stakeholders in the future. First of all, creating more opportunities for both sides to meet up and openly discuss critical EM issues are helpful. Also, to balance the time on presenting individual works and conducting group discussions, the researcher suggests to distribute some presentation slides and additional information via the internet or brochures. Finally, future engagement meetings should consider inviting private sectors, volunteers, local and state emergency managers, Non-Governmental Organizations, and faith-based groups to increase the diversity of participants.

The researcher also arranges those suggestions from all participants in 10 regions in a table at the end of this paper; this table should serve as a checklist for future meeting organizers, to assist with the facilitation and planning of future events.

INTRODUCTION

Between 2017 and 2019, the Federal Emergency Management Agency (FEMA) Higher Education Program organized academic engagement meetings in each of the 10 FEMA regions. These engagement meetings attracted both emergency managers and researchers to discuss opportunities and challenges in cooperation. As part of FEMA's strategic plan, the higher education program has a role in building a culture of preparedness—which relies on the cooperation between researchers and practitioners (Schwartz and Bond, 2019, p. 5). Therefore, organizing these meetings, allowing participants to discuss strategies of cooperation, and documenting the discussions within these meetings are critical. An overview of these meetings is shown in Table 1.

Table 1: An Overview of the 10 Regional Engagement Meetings

Region	States/Territories in the Region	Date	Location
1	CT, ME, MA, NH, RI, VT	8/29/17	Dean College in Franklin, Massachusetts
2	NJ, NY, Puerto Rico, Virgin Islands	8/7/19	St. John's University in Queens, New York
3	DC, DE, MD, PA, VA, WV	9/4/19	Loyola Hall at Immaculata University (1145 West King Road, Immaculata, PA 19345).
4	AL, FL, GA, KY, MS, NC, SC, TN	6/25/19	Georgia State University in Atlanta, Georgia
5	IL, IN, MI, MN, OH, WI	9/5/18	University of Chicago's Gleacher Center (450 N. Cityfront Plaza Dr., Chicago, IL 60611)
6	AR, LA, NM, OK, TX	2/23/18	University of North Texas in Denton, Texas.
7	IA, KS, MS, NE	9/25/19	Bellevue University in Bellevue, Nebraska
8	CO, MT, ND, SD, UT, WY	7/6/18	Colorado Technical University in Aurora, Colorado
9	AZ, CA, HI, NV, Pacific Islands	8/23/17	BMNT Inc. at Palo Alto, California
10	AK, ID, OR, WA	4/3/18	FEMA Region X Headquarters in Bothell, Washington

After each meeting, an academic point of contact compiled an after-action report and submitted it to the FEMA Higher Education Program. To better understand those insights and suggestions from all participants, the researcher utilizes the method of content analysis to analyze the after-action reports. The following sections begin with descriptions of the methodological concern in this research including the methods of developing codes and analyzing these reports. The analysis section comes after the methodological considerations, which discuss challenges and strategies to bridge the gap between researchers and practitioners. General conclusions and specific suggestions are provided at the end of this paper. The researcher also arranges the suggestions from all regions, so future organizers can be better equipped for engagement meetings.

METHODOLOGY

The reports

The researcher analyzes 10 after-action reports of FEMA regional engagement meetings between 2017-2019. All reports can be viewed and downloaded from the FEMA Higher Education Program webpage (FEMA, 2020).

Theoretical framework

The purpose of conducting this analysis is to establish strategies on how to bridge the gap between researchers and practitioners. Consequently, qualitative research is utilized to find possible insights and relationships within the reports. More specifically, the method of content analysis is applied to analyze these engagement reports, so the researcher is able to connect the concepts and ideas discussed during these meetings.

Since there are a relatively small number of reports, and there is little previous research on the subject, the researcher selects the grounded theory approach to analyze the engagement reports (Grbich, 2013, pp. 79-82). The researcher utilizes the open coding process to identify concepts and categories within the reports and later connects them to develop a complete article.

Developing codes

Prior to the analysis, the researcher first studied all data (the 10 engagement reports) to develop codes. Data-driven codes assist the researcher to group similar concepts and discussions together to find those interrelations between codes. "Providing resources to students," for example, becomes a code because many participants in meetings spoke frequently about this concept which includes providing internship opportunities to students, organizing disaster table-top exercises, and encouraging students to develop documents for local EM organizations.

Data Analysis

After developing a code book for this research (see Appendix A), codes are connected to concepts within the reports. The researcher utilizes computer software, Atlas.ti, to code concepts in the data. By coding and lumping similar concepts together, the researcher is able to establish interrelations between the codes/concepts. People spoke frequently about how to find internship opportunities, for instance, after they mentioned

the concept of providing resources to students. It is obvious that, when providing resources to students (a strategy to bridge academia and practitioners), people raise concerns about how and where to find EM organizations and events to send students out to develop practical experience.

Limitation

Using the method of content analysis, the researcher gains insights directly from those after-action reports. Since the researcher only attended one of these regional engagement meetings and did not write or prepare for these after-action reports, results of this analysis might be influenced by viewpoints and statements in the reports. Consequently, possible bias might be generated due to the different focus from people who took notes on meetings and drafted the reports. For example, this report finds many individual presentations occupied much of the meetings. This result might be due to the notetakers only recording and reporting on individual presentations, instead of the group discussions.

Delimitation

To mitigate the above possible bias, all engagement reports, before published on the FEMA Higher Education website, were provided to meeting participants for reviewing and editing.

ANALYSES AND DISCUSSION

Over the decades, researchers and emergency managers have reiterated the importance of combining both practitioners and research. Alexander (2000, p. 167), for example, says: "the roots of 'disasterologoy' involve the marrying of the theoretical and practical; if it will not work in the field, it will not work in theory either." As a participant in the meeting (Plesnarski and Weatherford, 2018, p. 13) says: "...future emergency managers must learn from current practitioners of the trade to be well equipped to manage disasters when they enter the workforce...Practitioners must be able to express what they need from future managers, be willing to share their knowledge, and let less experienced team members be part of the decision making process." These engagement meetings hosted by the FEMA Higher Education Program created an opportunity for "members of the regional emergency managers to meet together, engage in discussions, and sharing ongoing and planned best practices for successful collaboration" (Garibay, 2018, p. 2). Many participants in the reports appreciate these gathering opportunities and they suggest having similar events in the near future.

Why it is important to bridge both sides

As society moves forward, Emergency Management—like any other profession—has to adapt itself to accommodate new challenges and changes. After 9/11, the newly established Department of Homeland Security (DHS) combined FEMA and EM together. This change brought unavoidable new challenges to all emergency managers and also created duplications and complexities of organizations within the DHS. As a result, Wendy Walsh, the program manager of the FEMA Higher Education program, suggests that practitioners and researchers work together to "reduce the complexity of FEMA, which involves streamlining how they do business so that it is not so arduous for stakeholders and the whole community to work with the Agency. Education has the ability to identify the areas of complexity within FEMA processes that those involved on the inside cannot see" (Wall and Moore, 2018, p. 6).

Furthermore, researchers and practitioners, given the different working environments and job expectations, frequently look at a policy from different perspectives. The Incident Command System (ICS), for instance, had become a national policy of disaster

response after 9/11, but researchers usually utilize the large scale disasters as cases to reject the effectiveness of this system. Many practitioners, when they focus more on maintaining day-to-day operations, appreciate the hierarchical framework and clear chain of command created by the ICS (Chang, 2017).

Consequently, researchers utilize theories and research tools to discover those insights that might not be seem by the emergency managers. Practitioners obtain knowledge and real-world experience by implementing those EM policies on the ground. The two sides have to work together to lead those changes of EM and thus to better serve the citizens. However, there are still many challenges to bridge both sides. The scientific society, for example, relies on critics to find possible bias and limitations of every research project. Providing and receiving criticism is a critical component to an academic career and necessary in order to publish academic work. The practical community relies on teamwork and reaching consensus to completing routine works. Criticizing coworkers' work and evaluating peers' performance is not a common strategy to build teams and connect to other EM stakeholders. When these two groups work together, collaboration does not always happen. As Wendy Walsh spoke in the Region 10 engagement meeting (Wall and Moore, 2018, p. 6): "The academic community can at times be critical, rather than critique the system, which has the effect of shutting down collaboration and preventing learning from each other. If collaboration suffers then it becomes difficult to educate the next generation of emergency managers to ready the Nation for the next catastrophic disaster." To overcome this gap, participants in the 10 engagement meetings proposed some strategies to bridge the gap between academic and practitioner communities.

Strategies to bridge academia and practitioners

First of all, providing opportunities for both sides to meet and discuss critical issues is a key to bridge both sides. The majority of participants in the 10 meetings appreciate the FEMA Higher Education Program sponsoring and organizing the engagement meetings to allow regional EM stakeholders to discuss common challenges and strategies for cooperation. Before the end of the meetings, many participants requested organizing future meetings and gathering opportunities.

Second, creating a positive environment for collaboration is imperative. In these engagement meetings, the FEMA Higher Education Program manager, by extending the

concept of establishing the gracious space (CEL, 2020), set a positive tone for collaboration by (Jones, 2019, p. 3): 1) setting a spirit of inclusiveness, 2) creating a welcoming environment, 3) welcoming the guest, and 4) learning from the public, so both researchers and practitioners were willing to express their thoughts. Participants in the Region 7 meeting, for instance, mentioned: "The unstructured dialogue encouraged networking by affording participants the opportunity to connect a specific need with an individual or agency who possessed corresponding knowledge or resources that could fulfill it (Dillion, 2019, p. 11)."

Also, many EM programs provide resources to students to better understand and connect with practitioners. Many academic programs, for example, create internship projects with local EM organizations to provide students an opportunity to gain experience and prepare them for future EM/Homeland Security careers. Other resources offered to EM students include organizing the tabletop exercise, participating in community service, and developing specific guidelines or documents for EM organizations. All of these strategies not only prepare EM students to enter the field, based on professor Nancy Suski's experience, but students at Georgetown's EM program also "having various realizations descried as 'light bulb moments' through the hands-on experience that connected education with practice (Vigneaux, 2017b, p. 10)." It is not always, however, easy to allocate these resources to students. Wayne Sandford from the University of New Haven mentioned the difficulties of finding EM internship opportunities for international students because being a U.S. citizen is a prerequisite to working in local Department of Homeland Security (Vingeaux, 2017a, p.4). Small institutes, such as the Massachusetts Maritime Academy (MMA), have difficulties sending those students working on campus EM and security relevant departments because "it [the MMA] is a small school and thus its EM department assigned to protect the school is small and probably not as desirable for an intern as a large university might be (Vineaux, 2017a, p. 7)."

As a result, although participants discussed some strategies to link academic and practical communities, challenges to bridge the gap were also discussed in the engagement meetings.

Challenges to bridge academia and practitioners

As mentioned previously, given the different working environments and job expectations, researchers and practitioners sometimes have difficulties working together. More specifically, in the 10 engagement meetings, a couple of challenges were observed.

First of all, even though these meetings were organized to facilitate the cooperation between researchers and practitioners, many academics focused heavily on introducing their current research/working projects. A professor in the Region 2 meeting, for instance, discussed her general education science course. During the meeting, she mentioned:

> "Comprised of 79% African Caribbean and 17% Latinx of any race, [a specific course name] focuses on natural disasters and the ecosystems of the Caribbean since 1995. The course is required of all incoming freshmen of all majors and attracts 80–100 students per semester, per campus. Of note, the territory of the Virgin Islands has the lowest SAT scores, and the highest poverty rate than all 50 U.S. states, and 80% of [the University she works for] students require either remedial math or English (Jones, 2019, p. 9)."

Although these introduction presentations might bring some interests on knowing the latest development of EM and science, given the limited time in each engagement meeting, information might be provided in a brochure or online (e.g., webpages) instead of during oral presentations.

Also, many academic program administrators and practitioners emphasized their presentations on introducing the programs and organizations they currently lead. A lecturer from Region 4 described the EM program the university offers:

> "This [program] includes a Master of Public Administration degree that holds live online classes with many concentrations including emergency management, homeland defense and security, local and state government, non-profit management, and sustainability and public administration. Also available are Graduate Certificate Programs in public administration, emergency management, and homeland defense and security. There is also a new innovation center on campus that allows for increased opportunities in learning (Fast and Kushma, 2019, p. 12)."

Another participant, who is an advisor in a Homeland Security and EM Engagement team introduced the missions of her team, goals of developing this team, and a new Advisory Group the team created. She concluded her presentation with the importance of her team to reach out to small businesses because they are vulnerable to disasters (Schwartz and Bond, 2019, p. 11). Again, these presentations might be interesting and helpful for participants to further understand what EM programs and organizations are doing in the region, but having discussions with other participants and brainstorming possible cooperation strategies seems more align with the purposes of organizing engagement meetings.

Therefore, meetings with individual presentations (introducing research projects, departments, or organizations) normally fall short on meeting time, and thus cut off time for group engagement discussions. Participants in Region 8, for example, did not have time to complete the group discussions and thus "the larger group discussion was limited to one or two specific topics, namely education and preparing the next generation of emergency managers (Plesnarski and Weatherford, 2018, p. 16)." Region 8 participants consequently suggested, "If small group discussions cannot be held due to time constraints, facilitators may need to take on a stronger role to ensure all voices are heard and to cover more topics (Plesnarski and Weatherford, 2018, p. 16)." Participants in Region 10, for instance, did not have time to conduct breakout discussions and thus they suggest to, "Enforce time limits for each presenter to ensure that all presenters have enough time to complete their presentations. Encourage those who wish to speak more to collaborate with each other if time allows at the end, or to speak with each other after the meeting (Wall and Moore, 2018, p. 20)."

Last but not least, many participants suggest increasing the diversity of participants. As Region 4 participants said:

> "[...] a goal for the future would be to continually increase the number of participants and others that are stakeholders in the world of emergency management as well as encouraging increased diversity in the field itself. By increasing the buy-in from all involved parties, additional ideas and opportunities may be brought to the table that would not be known without their participation and insight. In addition, increasing buy-in amongst the

public as a whole is critical for making impacts on community preparedness

and resilience" (Fast and Kushma, 2019, p. 16).

Participants in Region 6 reached a consensus that: "the workshop participants that future collaborative efforts should include a wider range of stakeholders beyond universities and FEMA regional personnel (Garibay and Webb, 2018, p.12)." Engaging in dialogue among all these stakeholders strengthens partnerships, fosters collaborations, and contributes to a more effective and efficient system when disaster strikes. Private sector groups, state level emergency managers, volunteers, and faith-based groups are commonly mentioned that might be included in future engagement meetings.

CONCLUSIONS AND SUGGESTIONS

These 10 engagement meetings served as the first step to bridge the gap between academia and practitioners in each region. As the majority of participants in the meetings suggested, there should be more occasions to engage regional EM professionals and researchers. Based on the previous analysis and discussion, future engagement meetings are suggested to: 1) maintain the open discussions and welcome atmosphere during the meeting, 2) limit time for presentations, so participants have more opportunities to conduct both large and small group discussions, and 3) increase the diversity of participants.

First of all, more occasions and opportunities for EM stakeholders to work together are imperative. Creating a welcoming atmosphere is the key to successfully organizing these engagement events.

Also, although individual presentations are important for bridging the gaps between academia and practitioners in these meetings, this research suggests to balance the time of presenting individual works and conducting group discussions. One of the strategies to decrease the presentation time and also provide sufficient information to every participant is to move these presentation slides and additional information to online spaces and/or brochures, so participants with interests can access them and consequently allow more time to conduct both large and small group discussions. The Region 6, for example, creates a webpage for regional higher education collaborative (UTEP-CLHB, 2019). Other regions can create regional engagement webpages and store the meeting presentation files and information online, so participants can access the material and information from their devices and thus decrease the number of presentations focusing only on individual work.

Finally, as participants realized and discussed the importance of increasing diversity in the EM field. Based on the suggestions and consensus from participants of the engagement meetings, future meetings should invite people from various backgrounds, such as private sectors, state and local level emergency managers, volunteers, faith-based groups, and Non-Governmental Organizations (NGOs).

Participants in these meetings also provide specific suggestions relevant to the use of technology, strategy to increase the diversity of participants, consideration on selecting

meeting locations (logistic issues), and time management. The researcher has arranged these suggestions in Table 2, so future meeting organizers can use this table as a check list to organize and facilitate events.

With a better cooperation between all EM stakeholders, academia and practitioners will be able to lead the changes and developments in the field.

Table 2: Suggestions on Better Organizing Future Meetings

Type	#	Suggestions
Technology	1	Test online meeting software (e.g., Zoom) before the meeting to ensure virtual participants can participate in discussions and reduce delays associated with virtual presentations
Technology	2	Media files uploaded to the webinar software for virtual participants should also be copied to the computer linked to the projector to allow for independent play prior to the event and tested at the scheduled technology check.
Diversity	3	Increase the diversity of participants. Send invitations to state emergency managers, private sectors, volunteers, and faith-based groups
Logistics	4	Providing parking information and permits ahead of time
Logistics	5	Select the meeting location with enough parking spaces
Logistics	6	Select the meeting location accessible by public transportation
Logistics	7	Planning future meetings with advanced notice and advertising the virtual attendance option
Logistics	8	Crystalize expectations with the host party to ensure ample time will be provided for set up.
Time management	9	Schedule time for an uninterrupted lunch, so there's no interference in the participant's ability to hear the presentations and discussions.
Time management	10	Limit time for individual presentations and strictly enforce time limits on each presenter
Time management	11	Consider lengthening the meeting
Time management	12	The time zone for each event should be made clear in all scheduling
Time management	13	Every region should allow sufficient time to plan for this meeting

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Appendix A- The Codebook of this Research

Code Numbers: Codes	Explanations
1: Strategies to bridge academia and practitioners	Participants propose some strategies to bridge the gap
1-a: Create networking hubs for both sides	Creating opportunities to link both sides
1-a-a: Benefits	Benefits of bridging the gap
1-a-b: Challenges	Challenges of bridging the gap (hardware; such as environments, technologies, and so on)
1-b: Relevancy of academic programs to practice	Relate the current academic programs to practice and bridge the gap
1-b-a: Providing Resources	Providing internships or scholarships to students
1-b-a-a: Challenges	Challenges of providing internships or scholarships to students
1-b-b: Hiring practitioners as adjunct instructors	Hiring practitioners as adjuncts to bridge the gap
1-b-c: Listen to and understand what practitioners need	Participants suggest academic programs and faculty members listen to and understand what practitioners need
2: Challenges to bridge academia and practitioners	The barriers (software; such as mindset, methods of completing works, and so on) to bring practitioners and researchers together
2-a: Focus heavily on his/her research projects or work	Presenters only focus on his/her work but not on how to combine both sides
2-b: Emphasize introducing the programs/departments one is serving on	Presenters only focus on his/her institutes but not on how to combine both sides
2-c: Not enough time to discuss	Participants think there was not enough time to discuss
2-c-a: Suggestions on extending meeting times or call for more meetings	Participants think there was not enough time to discuss and thus they suggest extending the meeting time or having another meeting/gathering
2-d: Need for diverse representation at the event	Participants suggest increasing the diversity of the Emergency Management (EM) Stakeholders in this meeting
2-d-a: Suggestions on who should be in this meeting/gathering	Participants talked about who should be invited/involved in the future meetings/gatherings
3: Creative ideas in EM	Participants propose new ideas in the EM field
3-a: Current research	Participants talked about new research projects that can help bridge the gaps between both sides
3-b: Challenges of EM	Participants discussed the challenges of EM illustrating the importance of bridging both sides
3-b-a: Need of bringing practical experience to classrooms	Participants discussed the needs of bringing practical experience to classrooms
3-b-b: Needs of having academic training	Participants discussed the needs for practitioners to receive academic training
3-b-c: Suggestions	Participants suggest how to bridge the gap between both sides
3-b-c-a: How to better organize future engagement meetings	Participants suggest how to better organize future engagement meetings