

The Utilization of Client-Based Service-Learning in Emergency Management Graduate Curricula for the 21st Century

THOMAS J. CAREY III, Metropolitan College of New York
tcarey@mcny.edu

ABSTRACT

As we enter the second decade of the 21st century, the climate of catastrophic disasters and terrorist incidents continues to place demands upon professionals in the field of emergency management. This case study explores the perceptions of former graduate students, clients, and professors in gaining insight into how essential client-based service learning is to the preparedness of emergency management professionals enrolled in a Master of Public Administration in Emergency and Disaster Management program. The study assesses the use of this pedagogy by conducting in-depth interviews, focus groups, and observations. Limited research is available on the application and impact of client-based service learning as part of the current delivery practices found today in emergency management masters curricula.

Findings offer direction in future delivery practices and the challenges that occur among student, client and institutions of higher education offering emergency management programs. Students apply scholarship through the implementation of learned theories to practical problems for organizations in emergency preparedness planning. Client organizations and graduate students collaborate and share resources to produce common goals in the form of deliverables such as reports, plans and assessments.

INTRODUCTION

As the emergency management community enters the second decade of a post Hurricane Katrina era, we are left with some harsh realities as to how academia should be preparing future generations for the emergency management profession. Today's emergency manager is required to facilitate an all-hazards approach within a diverse threat environment while coordinating a whole community's capabilities in dealing with disasters (FEMA, 2011). Research suggests educational challenges remain in linking a student's theoretical knowledge with practical experience in preparing students for the rapid assimilation into the field of emergency management (Kapucu & Knox, 2013; McCreight, 2009; Waugh & Sadiq, 2011). This study recommends using a client-based service learning pedagogy as part of the current delivery practices found today in emergency management master's curricula in educating and orientating the emergency management student to real world practices.

The pedagogical model of service learning is examined in this study with the emphasis on the conceptual framework of client-based service learning. Client-based service learning is a variation of service learning in which the needs of a client become the focal point to produce emergency plans and assessments for a client (Waldner & Hunter, 2008). The study begins with an analysis of

the experiential learning practices taking place in emergency management curricula. The analysis is followed by a description of the methodology used and the results including network building, applying theory to practice, reflective thinking and enhancing leadership capacity. Although previous research points to the effectiveness of a client-based service learning pedagogy in graduate public service and administration programs (Schachter & Schwartz, 2009; Sprauge & Hu, 2015; Waldner & Hunter, 2008) and project management courses (Cooke & Williams 2004; Keys 2003; Pollard, 2012; Tynjälä, Pirhonen, Vartiainen, & Helle, 2010), this study narrows the focus to client-based service learning implemented within an emergency management master's degree program.

The purpose of this study is to examine the extent to which experiential learning, through the use of a client-based service learning model, is essential to the preparedness of emergency management professionals upon graduating from a master's program. The client is used to describe a public agency, private corporation or a nonprofit organization in need of emergency preparedness products such as a risk analysis, hazard vulnerability assessment, or an emergency operations plan. A student takes on a role of a consultant responsible for these types of deliverables. Students implement learned theories and course material as the basis for taking action to improve their knowledge and apply it to the workplace or internship site. The research site refers to client-based service learning and capstone assignments as a Constructive Action (CA) that shares the same components of these two learning approaches.

Despite research efforts that examine the educational needs of the of emergency management field, little has been done to identify how applied knowledge should be taught to graduate students. The literature reveals that only a handful of actual studies exist detailing the utilization of service learning opportunities within emergency management curricula (Knox & Harris, 2016; Kapucu & Knox, 2013). This study attempts to contribute to the depth of what's known since it is not exhaustive nor the last word. The significance of client-based service learning currently remains relatively a neglected area of implementation to emergency management graduate curricula.

LITERATURE REVIEW

Today, emergency management and homeland security master's students continue to challenge higher education institutions in their delivery approaches to learning as graduate programs must serve both traditional and nontraditional students (Goldberg, 2012; Maxfield, 2009; Russell & Fisher, 2014). In accommodating working professionals, a shift from theory-based education to experience-supported theoretical education remains (Kapucu & Knox, 2013). Scholars such as Oyola-Yemaiel and Wilson (2005) argue that emergency managers can only become autonomous self-regulators of their trade through obtaining both theoretically based knowledge and practical skill sets. Dewey, (1938) and Kolb (1984) have carved the path for experiential learning pedagogies such as client-based service learning enabling students to apply learned theory to practice within emergency management curricula.

Dewey (1933; 1938) is lauded as the father of experiential learning for his innovative educational approaches. Dewey's theory of experience (1938) and Kolb's experiential learning theory (1984) provides the basis for the conceptual framework that has evolved into client-based service learning (Waldner & Hunter, 2008). Dewey argued that an experience could only be educational

if that experience led out to the real world. In applying Dewey's philosophy, for an experience to be educative the learning and knowledge should be in the form of using projects as a means for producing learning from experience.

Kolb (1984) expanded on Dewey's work (1938) and argued that experiential learning is a process of learning where a learner experiences, reflects, thinks, and acts. Schön (1983), like Dewey (1938) and Kolb (1984) brought reflection to the forefront in organizing past experiences that can be drawn upon in a given situation. Schön's (1983, 1987) work provides educators with a framework to describe cognitive processes that translate theory to action. Renger, Wood, and Granillo (2011) found Kolb's experiential learning theory is robust in developing any emergency management training curricula as it has been pragmatic in nature of combining experience with learning. Experiential learning models such as client-based service learning enables students to apply Dewey and Kolb's theories to emergency management practices within higher education environments.

Client projects have become a staple for many university courses in learning project management skills (Cooke & Williams 2004; Keys, 2003; Tynjälä et al., 2010). The focus of client-based service learning addresses the needs of a client organization while educating students through pre-established milestones and deliverables to that client throughout several semesters. Instructors take on the role of a project manager who facilitates client needs while integrating learned theories with practical solutions (Waldner & Hunter, 2008). Client-based service learning allows students to achieve an understanding of what stakeholders require when preparing deliverables for them in a timely manner (Pollard, 2012). This type of educational practice unites educational goals with professional practices by allowing students to experience typical activities and relationships of a given profession (Kushma, 2003).

The foundation emergency management professionals rely on is their training and education in practices that are delivered in a competent fashion which have proven insufficient to date (Brown, 2015; McCreight, 2009; Parle & Brown, 2005; Stevens, 2013). The challenge still remains for institutions to provide a skills-based graduate experience that blends content knowledge with applied knowledge within homeland security and emergency management curricula (McCreight, 2014). Comiskey (2015) argues that academics have an obligation to their students to identify the knowledge, skills, and competencies necessary for homeland security disciplines including emergency management. Jensen (2014) points out that the integration of service learning can address core competency concerns while improving the delivery of courses within emergency management curricula. Numerous academics feel that service learning pedagogies have been deemed as an effective approach in bridging the gap between theory and practice to real world settings for public service and emergency management curricula (Bryer, 2011; Bushouse, Jacobson, Lambright, Llorens, Morse & Poocharoen, 2011; Darlington, 2008; Imperial, Perry, & Katula, 2007; Kapucu, 2011; Kapucu & Knox, 2013; Koliba, 2004; Shea & Weiss, 2013).

Clement (2011) asserted that students become *actualized* in the learning process when applying course instruction, content, and skills to a given situation. Actualization is the final stage of student development that leads to the realization of one's full development (Maslow & Frager, 1987). An individual then has the ability to dispense knowledge while being mindful of one's

limitations. Many scholars and practitioners alike argue that experiential learning pedagogies to include service learning enable emergency management students to obtain practical, hands-on learning opportunities that should be incorporated into emergency management higher education curricula (Alexander, 2013; Kapucu & Knox, 2013; Kushma, 2003; Stevens, 2013; Thomas & Mileti, 2003).

In one of the most comprehensive studies to date, Kapucu and Knox (2013) conducted a national study to promote a greater understanding of how service learning is used in emergency management programs. These authors argue that the incorporation of service learning projects can help address the core competencies that emergency management curricula are expected to follow (Blanchard, 2005; Cwiak, 2008; Jensen, 2014, Kapucu, 2011; McCreight, 2009). Much of the literature has focused largely on the impact of students working on practicum projects with client organizations (Astin, Vogelgesang, Ikeda, & Yee 2000; Eyler & Giles, 1999; Gray, Heneghan Ondaatje, Fricker, & Geschwind, 2000; Lambright & Lu; 2009; Sprague & Percy, 2014) while few examined the impact of client organizations (Campbell & Lambright, 2011; Schachter & Schwartz, 2009; Sprague & Hu, 2015).

METHODOLOGY

The current study assessed the use of client-based service learning by conducting in-depth interviews, focus groups, and observations. Through the lens of college graduates, select faculty, and practitioners taking on the role of a client this case study was explored. The following research questions were constructed to elicit responses from the participants in an effort to gain an understanding of what attributes learned from this case study could be transferred into the field:

1. What are the significant benefits that alumni perceive to have acquired as a result of taking part in a client-based service-learning project within an emergency management, higher education curriculum within an urban institution?
2. How do client-based service-learning projects prepare emergency managers for the field in the 21st century?
3. How and to what extent does service learning create an intersection between the classroom and the practice of emergency management?

There are 294 college emergency management programs with 72 certificate, diploma, focus-area, and minors; 54 associate degrees; 67 bachelor degrees; 92 masters-level programs; and nine doctoral-level programs offered throughout the United States (FEMA, 2015). However, no core curricula standard for the application of service learning exists within emergency management programs. Through purposeful sampling, the researcher had access to what Patton (1990) describes as an *information rich population*. An information rich population seeks depth from a small number of people which can be very valuable in illuminating the questions under study. This research study took place at an urban college in the northeast. The researcher was able to choose 13 former graduate student participants from this institution along with two focus groups consisting of three college professors who were employed as project managers, and three former clients. The criteria for selecting the participants for this study included that they be employed as emergency managers at the time of the interview, have three to five years of experience in the field of emergency management, and that they had been directly involved in a in an *emergency event* or

disaster. An emergency event necessitates interventions by first responders (Martin, 2016) where a disaster produces greater losses than a community can handle (Lindell, Perry, & Prater, 2007). All interviews and observations were coded to protect the confidentiality of the research participants. A self-developed questionnaire was designed from the research questions. Open-ended semi-structured interview questions were used to interview each group of participants who were involved within the study. The researcher convened a panel of subject matter experts in validating the research instrument for the study (Creswell, 2013; Kvale & Brinkman, 2009). Data was collected from a variety of methods to obtain several perspectives in establishing a converging line of inquiry (Rubin & Rubin, 2011; Yin, 2014). To minimize research bias, the data were triangulated by conducting in-depth interviews, focus groups, and observations.

Agreed-upon professional definitions found in the literature reviews, theoretical orientations, and personal experiences enabled the researcher to develop *a priori codes* which were used as a preliminary guide for this study (Bulmer, 1979; Kvale & Brinkman, 2009; Maxwell, 2005; Strauss, 1987). *A priori codes* are categories [data sets] that are established before the analysis based upon theories or similar topics (Stemler, 2001). Three rounds of coding followed. The first round of coding was accomplished through the creation of a data book using quotations from transcripts that were separated by Excel ® rows into chunks (Miles & Huberman, 1994). Each chunk represents a single idea, expression or concept in interpreting the data (Lincoln & Guba, 1985). During the second round of coding, each chunk was coded using a brief, exact, and accurate phrase that the researcher deemed best in describing the original statement (Saldaña, 2009). Finally, a third round of coding was utilized to differentiate among passages and consolidate these codes to generate fine-grained themes (Dey, 1993; Ryan & Bernard, 2003).

RESULTS

The overall findings revealed that major themes emerged and correlated to the three research questions in this study supported by the frequency of the sub-themes. Of the 13 former graduate student participants, four were female, and nine were male. Their ages ranged from the 26 to 45 years old. Focus group one participants of college professors consisted of three males. The ages ranged from the 46 to 61 years old. The participants from the second focus group of former clients consisted of three males. The ages ranged from the 35 to 51 years old. The education level of all the graduate participants was a master's degree in emergency and disaster management.

Three rounds of coding were performed, which yielded six major themes and 18 sub-themes from the original set of 776 codes. Table 1 depicts these themes including sample size and participant response percentages gleaned from interviews. The themes that emerged and provided context to the overall experiences of the study participants were the development of skills/knowledge, theory to practice, client commitment and engagement, client-based service-learning benefits, reflective thinking, and networking opportunities. Three subthemes emerged from the data for each theme which are discussed. Responses received from participants are labeled Participant 1 through Participant 19.

Table 1. Themes and Frequencies of Sub-Themes from Former Graduate Student Participant Interviews

Theme Number	Theme	Sub-Theme	(n)	%
1	Skill/Knowledge	Development of skills	13	100
		Retention of Lessons Learned	8	62
		Terminology	5	38
2	Theory to Practice	Real-World Applications	11	85
		Hands-On Approach	11	46
		Thinking Strategies	13	100
3	Client Commitment & Engagement	Positive Buy-In	6	46
		Neutral Buy-In	10	77
		Negative Buy-In	13	100
4	Client-Based Service Learning Benefits	Student Benefits	13	100
		Client Benefits	11	85
		Institutional Benefits	2	15
5	Reflective Thinking	Journaling as an Instructional Tool	7	54
		Reflection Paper and Notetaking	10	77
		After-Action Review and Reflective Discussion	9	69
6	Networking Opportunities	Internships	7	54
		Job Shadowing	4	31
		Employment Opportunities	9	69

Skills/Knowledge. All 13 former graduate student participants stated the development of skills was one of the main benefits derived from their client-based service-learning experience. These skills included hazard vulnerability assessments, geographic information system mapping, risk assessments, emergency operations plans, and conducting an after-action review. Participant 18 a client research participant shared the importance of learning skill sets. He stated,

There are a lot of skills that you can take away from this project ... writing up an emergency operations plan for example ... writing an after action report, how to do a matrix, ... the components of the matrix, like who's responsible and for what ... and the target capabilities list, you know, all these things that fall into play so that when they [the students] go out there in the field, they can say I can do this!

Eight former graduate students and two project manager professors stated that the retention of lessons learned proved valuable given that they were transferable into their work settings. Participant 1 stated “although some of the skills are perishable. ... I found that I had a great improvement in my writing, reviewing plans, and understanding plans.”

Five former graduate student participants identified the importance of learning and grasping emergency management terminology. The graduate participants shared their experiences on how terminology coexists in the classroom and in the workplace. Participant 2 believed terminology as being essential in the workplace, stating:

You get to understand what the practitioners are seeing while being in an academic setting ... We got to hear how they speak and learned for instance that if someone calls for a “bus,” they need an ambulance; they don’t need a school bus! Being able to understand that and see how they interact with each other was an awesome experience.

Theory to Practice. The participants were asked to share their perceptions of the intersection between the classroom and the practice of emergency management. Many of the former graduate student participants shared that the concept of theory to practice led to real-world applications, hands-on opportunities, and a host of thinking strategies. Of the 13 former graduate student participants, 11 believed that classroom learning became more apparent when its application became necessary. Theory was perceived as useful when it was needed or helpful in a real-life situation.

Participant 12 believed that the process of applying critical thinking was very valuable for the field of emergency management. He described a theorist’s definition of critical thinking (Dewey, 1910) that he utilized during his client-based service-learning project. He stated, “. . . doing a hands-on approach and working things out and seeing how issues arise and how to deal with them.”

Within the subtheme of real-world applications former graduate student participants felt the learning process lent itself to collaboration allowing them to produce deliverables to the client within a timely fashion while expanding their student portfolio. Participant 2 stated, “A lot of collaboration ... being able to work with different organizations that you wouldn’t have had contact with before.” Participant 12 described hands-on opportunities during his client-based service learning project stating,

You need to have that hands on approach in this field! It’s not a field like a chemistry or biology where there’s strong sciences behind it and strong discoveries, this is very much a social science field ... You need to go out and do it to understand it completely.

Participant 13 described hands-on opportunities during his client-based service-learning project with a private hospital. He stated,

The project was very interactive as it got everybody involved in the process... it developed practical connections for students that weren’t already in the field. It really enabled them [the students] to see firsthand the operational environment of a large municipal hospital. Students learned the value of testing plans whether it be a drill, tabletop exercise or functional exercise ...

Client Commitment and Engagement. Both former graduate student participants and all three project manager professor focus group members determined that clients were more or less helpful based on the amount of buy-in provided to them in the form of interaction and support. These participants concluded that not all clients are equally involved regarding their commitment and engagement toward a given client-based service-learning project. The former graduate student participant opinions fell into three categories: positive, neutral, and no buy-in at all.

Participant 2 described his positive buy-in experience with a volunteer fire department. He stated, We had such a great turnout from them [the client] to come and see what we were presenting. It's really hard to get that level of interest and commitment; they're volunteers, they don't have to be there ... from the leadership down to the newest members of the organization. As a result, a new committee was formed to improve [draft] documents and to work through implementing this [project], our project immediately.

Client buy-in was not as evident for organizations not directly involved with emergency management functions. Participant 1 reflected on his discussions with several other participants in dealing with a marginal client commitment. He stated,

Students felt the client wouldn't follow up on making adjustments [over time] to the emergency operations plan [students had prepared for the client]. The client just wanted to save money and not invest too many resources into the project. . . . [However] the client became aware of their vulnerabilities as a result of the students conducting a Hazard Vulnerability Assessment [for the client].

Some clients that participated in the project did not always embrace the partnership with the vigor that the alumnus participants and faculty had expected. Participant 6 shared her cohort's experience in dealing with a difficult private sector client. She stated,

We also had to do a lot of advocating for why we're there. ... When we were meeting [with] department heads, it was like [starting from] scratch. ... [In] being able to successfully complete an event ... with a very difficult client ... people [were] wearing four or five different hats. Definitely, exercises were not one thing they wanted to pay a lot of attention to! So as a team, we accepted the responsibility to do all of the preplanning and the administrative work for them.

Client-Based Service Learning Benefits. Participants reflected on the benefits derived by client-based service learning found within three subthemes: student benefits, client benefits and institutional benefits. Participant 18 recognized people entering into a new organization often identify problems that people who have been there for a long time might have missed.

Participant 18 reflected on how the project changes organizational awareness using outside perspectives:

[Students] ... saw [things] that I didn't even think about, and I mean that's the beauty of having the different eyes and the different backgrounds coming to your organization, because they start to see things that you have missed.

Reflective Thinking. The concept of reflective thinking provided learners with the ability to process available data in analyzing situations that were presented to them. Reflective thinking allowed students to connect field experience and knowledge drawn from course content in understanding applied knowledge. The former graduate student participants believed reflection could be achieved through reflective papers, journaling, note taking, after-action reviews (AARs), and reflective discussions. Participant 5 shared his thoughts on the value of maintaining a journal stating, "[Journaling] makes you think about what you experienced, what you learned, what you accomplished, and to put it into some context."

Participants felt the AAR process was a good instructional tool that reinforced the students' learning and revealed problems their clients faced. Participant 13 reflected how a detailed AAR aided a client, stating, [The client] "didn't have a structured AAR until we developed a much more standardized tool for them."

Other former graduate student participants pointed out a variety of methods in which reflection can be captured. For example, Participant 8 added:

I think that people process things differently and therefore reflect in different ways. Reflection is always important ... Some people want to write things down and some people want to talk about an experience [with others] ... You would have to individualize these methods as it is unique to each person. Reflection should address key points in our field [emergency management] that say: What did we do here? What did we do well? What were the results? What could we have done better? I think that's vital!

Networking Opportunities. The subthemes of internships, job shadowing and employment opportunities identified how the client-based learning process led former graduate participants into the actual emergency management career path. Participant 16 reflected on how the job shadowing technique allowed students to gain first-hand knowledge of the various components of the Incident Command System (ICS). He stated,

We partnered up with the forest service here [at the college], sending students out [west] on an actual forest fire [operation] ... to get a better understanding of the various components within the ICS. ... it's used at all different levels [within organizations], it's something that the students should have a strong understanding of. ...

Many of the former graduate student participants found that the client-based service-learning process benefited them the most by obtaining employment upon graduation. Participant 13 stated, "[The client-based service learning process] definitely accelerated people's opportunities as far as getting a job in the career path of emergency management. So it definitely was helpful."

Participant 2 added to this discussion, stating: "I continue to do private work with [a municipality] along with their constituents based off the introduction that was made through our [Constructive Action] CA upon graduation."

Observations. For this study, the researcher took on the role of a participant-as-observer to collect data by way of observations of two site visits at a large urban municipal hospital in the northeast. The first observation consisted of current students performing a risk analysis as part of an active shooter plan for the hospital. The second observation took place within the hospital's Emergency Operations Center (EOC) during a tabletop exercise. It appeared that the questions the students used to probe the client were reflective of the theories discussed in class. The data collected from the observations revealed peer-to-peer learning took place during the end of these sessions where the students were able to identify some shortcomings that the client's procedures did not currently cover for their client's organization. Other data collected from the observations that were consistent with data collected from the interview and focus group transcripts were students expressing signs of empowerment from realizing they were providing valuable solutions to real-life threatening situations. For example, the researcher observed students making several verbal and physical expressions of satisfaction when they

learned that, as a result of their tabletop exercise, the client made several recommendations for changing the hospital's protocol for training all staff on how to handle active-shooter situations.

DISCUSSION

Respondents of this study were involved in the development of key deliverables to clients in the form of emergency plans similar to that of results reported by Kapucu and Knox (2013), McEntire (2002), and Pine (2002). In broadening their emergency management skills for the field, former graduate student participants prepared hazard vulnerability assessments, risk assessments, emergency operations plans, and conducted after-action reviews. Finding one was considered an area of high importance to these participants in their preparation as new emergency managers to the field upon graduation. Other significant findings revealed the value of applying reflective practices and critical thinking at various stages of the client-based service learning project. Reflective practice can foster critical thinking, problem solving, and decision making (Rolheiser, Bower, & Stevahn, 2000) which are all crucial tasks in performing the duties of an emergency manager. Peerbolte and Collins (2013) argue it is essential for emergency managers to think critically when identifying and anticipating situations that require them to make an effective decision. Critical thinking enables one to actively process an issue that has been presented to them by thinking it through in providing a relevant solution to a given problem. Boyne (2012), Darlington (2008) and Kiltz (2009) point out that the development of critical thinking skills in emergency management programs goes beyond the traditional lecture format. Incorporating critical thinking strategies as part of experiential learning practices within curricula provides context for graduate students to better address a crisis at the tactical, operational and strategic levels within the field.

An integral approach to the success of any client-based service-learning program lies in the type of commitment made by the client. While respondents generally perceived to have acquired significant benefits from the program, they shared that the amount of client commitment and engagement was lacking. Administrators might reexamine policies that are already in place to ensure clients who offer their sites for experiential learning are committed to achieving the prescribed expectations of the program. While findings from this study show promise for client-based service learning initiatives, scholars point to their limitations from a client's perspective on student performance (Blouin & Perry, 2009; Sprague & Hu, 2015; Vernon & Ward 1999; Worrall, 2007). Impediments must also be considered from the viewpoint of the sponsoring client at the onset of each project. These include labor-intensive processes such as the scheduling of personnel to support the project, safety protocol compliance, securing proprietary interests, and possible liability issues. Student success for this type of program requires simultaneous supervision and support maintained by both the client and institution from multiple levels of each organization throughout the project. Therefore, a set schedule specifying required client-student engagements and deliverables can be supported by a memorandum of understanding in achieving the goals of both parties.

Emergency management is an applied field requiring practitioners to put theory into action. One implication of the study revealed that building proper leadership capacity can only truly be achieved through a form of experiential learning in which proper guidance and supervision is

provided by both instructor and client. Respondents reported that they were able to develop leadership capacity through taking on the role of team leader which contributed to their growth and development; the assignments they received, which promoted team work; and the collaboration they engaged in, giving them a sense of empowerment. Emergency management program faculty should examine research conducted by leadership study experts in determining the appropriate styles that are most suitable in preparing future emergency managers for the employment. The more time that can be allotted for the students to apply theory to the real-world environment is a key task for educators to fulfill in meeting the demands of this challenging field. This endeavor also promotes growth in the areas of teamwork and collaboration that supports emergency managers in their ability to lead.

The findings of this study reveal that there is a void in teaching practical skill sets and applied knowledge to graduate students. Client-based service learning provides students with the foundation to apply course instruction, content, and skills in meeting the demands of the emergency management profession. As demonstrated by the literature this high impact educational practice can prove to be extremely beneficial by imparting applied knowledge that is a necessary fit in meeting the demands of the emergency management community (Blanchard, 2001; Kapucu, 2011; Kapucu & Knox, 2013; Kiltz, 2009; Kuh, Schneider, & Association of American Colleges and Universities, 2008; Marks, 2005; McCreight, 2014). It is recommended that graduate programs providing students with a traditional (in person) classroom setting of a year or more should incorporate a client-based service learning component for each semester within the curricula. Online and hybrid settings should utilize a capstone approach toward the end of a program to demonstrate applied knowledge.

CONCLUSION

The current state of emergency management and homeland security education reveals several challenges as they relate to clear academic standards including a model curriculum, core competencies, and accreditation standards supported by the pedagogical method of experiential learning. The objective of this research was to determine what type of benefits client-based service learning provides graduate students in their preparation for serving in the role as an emergency manager. The integration of client-based service learning plays a vital role for students to obtain the applied knowledge and skills the profession demands. Service learning, namely client-based service learning within emergency management curricula has had success in the form of capstone courses, client-based projects, and experiential experiences taking place among clients, communities, and students (Knox & Harris, 2016; Kapucu & Knox, 2013, Kushma, 2003; McEntire, 2002; Pine, 2002; Reed, 2014). The addition of this pedagogy into existing graduate programs to include traditional, online and hybrid teaching platforms is feasible regardless of length of a given program. This process enables today's students in building leadership capacity through the fostering of peer-to-peer learning while receiving valuable feedback from clients in a workplace setting which empowers all participants.

This study was exploratory in nature to aid graduate curriculum developers, instructors and program administrators in identifying what skills students and practitioners in the field value necessary prior to taking on the role as a new emergency manager. More research on a larger scale is recommended to link appropriate pedagogies for use in emergency management

education in readying tomorrow's students for the position of an emergency manager. This includes preparing students for employment in government, private and non for-profit organizations as duties and responsibilities differ. Looking forward, the study raised more questions about how graduate programs should select clients and instructors for projects, address client impediments, and identify client and school resources. The findings gleaned from this study will contribute to a limited body of literature in the area of client-based service learning in emergency management graduate curricula.

REFERENCES

- Alexander, D. (2013). Approaches to emergency management teaching at the master's level. *Journal of Emergency Management, 11*(1), 59–72. doi:10.5055/jem.2013.0128
- Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., & Yee, J. A. (2000). *How service learning affects students*. Los Angeles, CA: University of California Higher Education Research Institute.
- Blanchard, B. W. (2001). *FEMA higher education project manager discusses the new generation of emergency managers*. Retrieved from <http://training.fema.gov/EMIWeb/edu/highpapers.asp>
- Blanchard, B. W. (2005). *Top ten competencies for professional emergency management*. Retrieved from <http://training.fema.gov/EMIWeb/edu/EMCompetencies.aspx>
- Blouin, D. D., & Perry, E. M. (2009). Whom does service learning really serve? Community-based organizations' perspectives on service learning. *Teaching Sociology, 37*(2), 120–135.
- Boyne, S. M. (2012). Crisis in the classroom: Using simulations to enhance decision-making skills. *Journal of Legal Education, 67*(2), 311–322.
- Brown, K. L. (2015). Assessing the educational needs of emergency management personnel. *Journal of Homeland Security Education, 4*, 1–19. Retrieved from <http://www.journalhse.org/v4-brown.html>
- Bryer, T. A. (2011). Linking students with community in collaborative governance: A report on a service-learning class. *Journal of Public Affairs Education, 17*(1), 89–114.
- Bulmer, M. (1979). Concepts in the analysis of qualitative data. *The Sociological Review, 27*(4), 651–677.
- Bushouse, B. K., Jacobson, W. S., Lambright, K. T., Llorens, J. J., Morse, R. S., & Poocharoen, O. O. (2011). Crossing the divide: Building bridges between public administration practitioners and scholars. *Journal of Public Administration Research and Theory, 21*(suppl 1), i99–i112.
- Campbell, D. A., & Lambright, K. T. (2011). How valuable are capstone projects for community organizations? Lessons from a Program Assessment. *Journal of Public Affairs Education, 17*(1), 61–87.
- Clement, K. E. (2011). The essentials of emergency management and homeland security graduate education programs: Design, development, and future. *Journal of Homeland Security and Emergency Management, 8*(2), 1–10.
- Comiskey, J. (2015). How do college homeland security curricula prepare students for the field? *Journal of Homeland Security Education, 4*, 20–40. Retrieved from <http://www.journalhse.org/v4-comiskey.html>
- Cooke, L., & Williams, S. (2004). Two approaches to using client projects in the college classroom. *Business Communication Quarterly, 67*(2), 139–152.

- Creswell, J. W. (2013). *Qualitative inquiry & research design* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Cwiak, C. L. (2008). FEMA emergency management higher education program report. Retrieved from <http://www.training.fema.gov/emiweb/edu/surveys.asp>
- Darlington, J. (2008). *The profession of emergency management: Educational opportunities and gaps*. Macomb, IL: Western Illinois University.
- Dewey, J. (1910). *How we think*. Boston, MA: Heath.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educational process*. Lexington, MA: Heath.
- Dewey, J. (1938). *Experience and education*. New York, NY: Simon & Schuster.
- Dey, I. (1993). *Qualitative data analysis: A user-friendly guide for social scientists*. London, England: Routledge Kegan Paul.
- Eyler, J. S., & Giles Jr., D. E. (1999). *Where's the service learning?* San Francisco, CA: Josey-Bass.
- FEMA (2011). *A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action*. Washington, D.C.
- FEMA Emergency Management Institute. (2015). *The college list*. Retrieved from <http://training.fema.gov/EMIWeb/edu/collegelist/>
- Goldberg, K. (2012). Reflective journaling: Building bridges between theory and practice. *Journal of Homeland Security Education, 1*, 63–69.
- Gray, M., Heneghan Ondaatje, E., Fricker, D., & Geschwind, S. (2000) Assessing service-learning: Results from a survey of “learn and service America, higher education.” *Change, 23*(2), 30–39.
- Imperial, M. T., Perry, J. L., & Katula, M. C. (2007). Incorporating service learning into public affairs programs: Lessons from the literature. *Journal of Public Affairs Education, 13*(2), 231–252.
- Jensen, J. (2014, June). Maximizing the potential of emergency management higher education part II. *16th Emergency management higher education symposium*, FEMA Emergency Management Institute, Emmitsburg, MD.
- Kapucu, N. (2011). Developing competency-based emergency management degree programs in public affairs and administration. *Journal of Public Affairs Education, 17*(4), 501–521.
- Kapucu, N., & Knox, C.C. (2013). Utilization of service learning in emergency management programs in the United States. *Journal of Public Affairs Education, JPAE 19*(1), 31–51.
- Keys, A. C. (2003). Using groups in MIS: Strategies for instruction and management. *The Journal of Computer Information Systems, 43*(3), 18.
- Kiltz, L. (2009). Developing critical thinking skills in homeland security and emergency management courses. *Journal of Homeland Security and Emergency Management, 6*(1), 1–23.
- Knox, C. C., & Harris, A. S. (2016). Evolution of an experiential learning partnership in emergency management higher education. *Journal of Emergency Management, 14*(3), 201–211.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
- Koliba, C. (2004). Assessing reflection assignments for public affairs courses: Implications for educating reflective practitioners. *Journal of Public Affairs Education, 10*(4), 295–309.
- Kuh, G. D., Schneider, C. G., & Association of American Colleges and Universities. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.

- Kushma, J. A. (2003). *Incorporating service-learning in emergency management higher education curriculums*. Retrieved from <http://training.fema.gov/EMIWeb/edu/sl.asp>
- Kvale, S., & Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative research interviewing*. Los Angeles, CA: Sage.
- Lambright, K. T., & Lu, Y. (2009). What impacts the learning in service learning? An examination of project structure and student characteristics. *Journal of Public Affairs Education, 15*(4), 425–444.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Lindell, M. K., Perry, R. W., & Prater, C. (2007). *Introduction to emergency management*. Hoboken, NJ: Wiley.
- Marks, C. A. (2005, April 29). *Professional competencies for the master's level emergency manager: Knowledge systems necessary for the emergency manager of the 21st century*. Retrieved from <http://training.fema.gov/EMIWeb/edu/EMCompetencies.asp>
- Martin, G. (2016). *Understanding homeland security*. Thousand Oaks, CA: Sage Publications.
- Maslow, A. H., & Frager, R. (1987). *Motivation and personality*. New York: Harper and Row.
- Maxfield, R. J. (2009). Asynchronous Online Learning: Perceptions and Experiences of Nontraditional Adult Emergency Services Students. *International Fire Service Journal of Leadership and Management, 3*(2), 23–30.
- Maxwell, J. (2005). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage Publications.
- McCreight, R. (2009). Educational challenges in homeland security and emergency management. *Journal of Homeland Security and Emergency Management, 6*(1), 1–6. doi:10.2202/1547-7355.1576
- McCreight, R. (2014). A pathway forward in homeland security education: An option worth considering and the challenges ahead. *Journal of Homeland Security and Emergency Management, 11*(1), 25–38. doi:10.1515/jhsem-2013-0999
- McEntire, D. A. (2002). *Service learning in the emergency administration and planning program*. Retrieved from http://training.fema.gov/EMIWeb/downloads/SL_McEntire.doc
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks: Sage Publications.
- Oyola-Yemaiel, A., & Wilson, J. (2005). Three essential strategies for emergency management professionalization in the US. *International Journal of Mass Emergencies and Disasters, 23*(1), 77.
- Parle, W., & Brown, A. (2005). *Educational needs survey report*. Higher Education Project of the Federal Emergency Management Administration. Retrieved from <http://training.fema.gov/EMIWeb/edu/surveys.asp>
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage Publications.
- Peerbolte, S. L., & Collins, M. L. (2013). Disaster management and the critical thinking skills of local emergency managers: correlations with age, gender, education, and years in occupation. *Disasters, 37*(1), 48–60.
- Pine, J. C. (2002). Developing site emergency response plans: A case study in service learning. Retrieved from https://training.fema.gov/hiedu/el/sl_casesty.aspx
- Pollard, C. E. (2012). Lessons learned from client projects in an undergraduate project management course. *Journal of Information Systems Education, 23*(3), 271–282.

- Reed, T. (2014, February). *Service learning at JSU combines academics, civic responsibility*. Retrieved from <http://www.jsu.edu/news/articles/2014/02/servicelearning-at-jsu-combines-academics,-civic-responsibility.html>
- Renger, R., Wood, S., & Granillo, B. (2011). Using experiential learning theory to design emergency preparedness training curricula. *Journal of Emergency Management*, 9(5), 57–63.
- Rolheiser, C., Bower, B., & Stevahn, L. (2004). *The portfolio organizer: Succeeding with portfolios in your classroom*. Moorabbin, Vic: Hawker Brownlow Education.
- Rubin, H. J., & Rubin, I. S. (2011). *Qualitative interviewing: The art of bearing data* (3rd ed.). Thousand Oaks, CA: Sage.
- Russell, E. J., & Fisher, J. R. (2014). The impressions of emergency services students in a Homeland Security course: The benefits of reflective thinking and journaling. *Journal of Homeland Security Education*, 3, 14–24. Retrieved from <http://www.journalhse.org/v3-russellfisher.html>
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field methods*, 15(1), 85–109.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Los Angeles, CA: Sage.
- Schachter, D. R., & Schwartz, D. (2009). The value of capstone projects on participating client agencies. *Journal of Public Affairs Education*, 15(4), 445–461. Retrieved from <http://www.naspaa.org/jpaemessenger/Article/v15n4-schach&schwa.pdf>
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books, Inc.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.
- Shea, J., & Weiss, A. F. (2013). From traditional to client-based nonprofit management course design: Reflections on a recent course conversion. *Journal of Public Affairs Education*, 19(4), 729–747.
- Sprague, M., & Hu, O. (2015). Assessing the Value to Client Organizations of Student Practicum Projects. *Journal of Public Affairs Education*, 21(2), 263–280.
- Sprague, M., & Percy, C. R. (2014). The immediate and long-term impact of practicum experiences on students. *Journal of Public Affairs Education*, 20, 91–111.
- Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research and Evaluation*, 7(17).
- Stevens, D. (2013, February). Redefining the emergency manager. *Emergency Management*. Retrieved from <http://www.emergencymgmt.com/training/>
- Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge, UK: Cambridge University Press.
- Thomas, D., & Mileti, D. (2003). *Designing educational opportunities for the hazards manager of the 21st century*. Retrieved from <http://training.fema.gov/EMIWeb/edu/highpapers.asp>
- Tynjälä, P., Pirhonen, M., Vartiainen, T., & Helle, L. (2009). Educating IT project managers through project-based learning: A working-life perspective. *Communications of the Association for Information Systems*, 24(1), 16.
- Vernon, A., & Ward, K. (1999). Campus and community partnerships: Assessing impacts and strengthening connections. *Michigan Journal of Community Service Learning*, 6, 30–37.
- Waldner, L. S., & Hunter, D. (2008). Client-based courses: Variations in service learning. *Journal of Public Affairs Education*, 14(2), 219–239.

- Waugh, W. L., Jr., & Sadiq, A. A. (2011). Professional education for emergency managers. *Journal of Homeland Security and Emergency Management*, 8(2), 9. doi:10.2202/1547-7355.1891
- Worrall, L. (2007). Asking the Community: A Case Study of Community Partner Perspectives. *Michigan Journal of Community Service Learning*, 14(1), 5–17.
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage Publications.

ACKNOWLEDGMENT

My thanks to Ali Gheith Director of the Master of Public Administration in Emergency and Disaster Management Program at Metropolitan College of New York in providing his support and guidance throughout the study.

Correspondence concerning this article should be addressed to Thomas J. Carey, Emergency and Disaster Management Program, Metropolitan College of New York, New York, NY 10006.