

DIRECT SERVICE AND PROFESSIONAL DEVELOPMENT DURING DISASTER RECOVERY EFFORTS

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ABSTRACT

Disaster recovery professionals often focus on activities such as coalition building, grant development, and technical assistance in impacted communities. While these capacity-building activities are crucial for setting a solid foundation to help any disaster-affected community, direct rebuild services that occur in the field serve the immediate needs of disaster victims. Disaster recovery professionals who participate in direct rebuild services, gain important first-hand knowledge of personal and communal factors that can only be understood at the ground level. This study explains the differences between direct and indirect rebuild services and spotlights how engaging in both service areas help one become a more resilient leader. Following the devastating 2017 hurricane season, many direct service-based disaster rebuild efforts were initiated, including efforts in Puerto Rico through a special program set-up by the State University of New York (SUNY). Volunteer service-based initiatives allow students to develop competencies and insights from experiential-based learning, which ultimately can help students forge careers in disaster recovery.

JEL: L3, O1

KEYWORDS: Disaster Recovery, Volunteer Management, Resilience

INTRODUCTION

The 2017 hurricane season was the most devastating recorded to date, totaling \$344 billion dollars in global damages. A total of 330 natural catastrophes occurred in 2017, including tropical storms Harvey and Maria, two of the most destructive storms in United States history. The National Oceanic and Atmospheric Administration (NOAA) estimated that the damage caused by Hurricane Harvey was at least \$125 billion, making it the second-costliest US tropical storm ever. This massive cyclone greatly impacted the Texas Gulf Coast and Greater Houston. According to the Federal Emergency Management Agency (FEMA), the primary threat from Hurricane Harvey occurred due to historic flooding and record rainfall with totals of 60.58 inches. Hurricane Maria devastated Puerto Rico as a Category-4 hurricane. NOAA estimated that Hurricane Maria's damage to Puerto Rico and the U.S. Virgin Islands was more than \$90 billion. These figures make Hurricane Maria the third most costly storm in US history to date, just behind Hurricanes Katrina in 2005 and Harvey in 2017.

FEMA supports the United State's emergency management programs and has identified five *Mission* areas of emergency management for properly handling catastrophic damage. These *Mission* areas include Prevention, Protection, Mitigation, Response, and Recovery. Following a major disaster, FEMA utilizes the National Disaster Recovery Framework (NDRF) to support their Recovery Mission's collaborative efforts for the restoration and revitalization of the affected region's damaged infrastructure and economy.

This framework also establishes important responsibilities for all involved stakeholders as they plan to rebuild.

In addition to FEMA, the Corporation of National and Community Service (CNCS) is the federal agency that supports national service programs, including AmeriCorps. AmeriCorps programs are diverse in services available and therefore defines the distinction between direct and indirect service types. Direct services are more explicit in nature. They can involve individually working with service recipients and/or stakeholders through activities that include mentoring, food/supplies distribution, manual labor, and project supervision. In contrast, indirect services more developmental and are carried out through capacity building activities that can include coalition building, volunteer recruitment, grant writing, and project coordination. Disaster recovery *Missions* often constitute both direct and indirect relief support services. The contrasts are made in processes that are more strategic (indirect) versus those that execute the plans (direct).

Because of experiential-based direct rebuild service programs that were implemented after 2017 hurricanes, the author was able to gain invaluable on-site hands-on experience which taught important leadership aptitude and career advancement. Results will show a concrete example of how participation in direct service activities can lead to valuable professional development in fields relating to community recovery and building capacity. The remainder of this study will be organized with sections that include a literature review, data and methodology, results, a path forward, assessment, and concluding comments.

LITERATURE REVIEW

Interest in disaster management often engages scholars and professionals of different backgrounds to study specific topics and then publish their findings and conclusions. The following are just a few interesting examples.

In the book, *The Student Leadership Challenge: Five Practices for Becoming an Exemplary Leader*, authors James Kouzes and Barry Posner identify leadership traits that can be utilized and matured when taking on leadership roles of mission operations. The book's authors account first-hand stories of students and how they defined their leadership objectives using progressive steps of action led by a set of guiding principles. These practices are broken down as model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. Such practices are very beneficial to utilize when volunteering and performing any type of disaster relief service.

Lessons learnt from innovation: Red Cross volunteers by Georgia Hay reveals how Red Cross volunteers in Australia fostered disaster resilience in communities by practicing resiliency measures themselves. Red Cross's "Emergency Services Volunteer Leadership Group" (ESVLG) volunteers that were assigned to the most challenging projects, had the greatest leadership experiences. These volunteers were then identified as having the best potential to support emergency preparedness, response, and recovery activities within their collaborative projects.

Further research explored elements that make an effective volunteer program. *The Limits and Possibilities of Volunteering: A Framework for Explaining the Scope of Volunteer Involvement in Public and Nonprofit Organizations* by Rebecca Nesbit, Robert Christensen, and Jeffrey Brudney illustrates eight dimensions of volunteer involvement and management. These dimensions are based on the choices of organizations and individual volunteers. They include how an organization decides to use volunteers, how many volunteers are needed, the scope of volunteer work, the volunteer status of contributors, how volunteers enter & exit a program, the characteristics of the volunteers, the duration of volunteer commitment, and the quality of volunteer work. Many choices and strategic decisions must be made when organizing and managing a volunteer program. Common methods of measuring impact focus on

quantitative elements such as the number of volunteers required for volunteer hours dedicated. However, the article explains how additional elements should be evaluated such as culture, community relations, and leadership attributes. Ultimately, a sustainable volunteer program can be crafted through strategic planning, compelling work, and the efficient allocation of resources.

On the other hand, in the article *Improving disaster response through the science of work*, Natalie Wright and Lori Foster explain how disaster responders who are not properly vetted or trained can often produce a negative impact to disaster response efforts because of the negative psychological attitudes and outcomes they can create. Wright and Foster explore the relationship between Industrial Organization (I-O) psychology and disaster response. I-O psychology addresses the thoughts, attitudes, and “human elements” of poorly trained workers that contribute to a variety of workplace challenges. Their scientific research shows that good response can be optimized when there is a strong focus on workers’ well-being. Therefore, they conclude that those working in the realm of disaster services must have the right characteristics and proper training that will allow successful work in stressful, chaotic, and uncertain crisis situations.

Some believe that traits such as volunteerism and leadership are hereditary. The article *Is Volunteerism in Your DNA?* by Marc P. Palker attempts to show how parents can influence one’s likelihood to volunteer. The focus is on examples in upbringing that develop attitudes that support commitments to causes. Palker then explains how the ability to gain diverse experiences through volunteerism can prove to be more valuable than immediate monetary compensation.

The history and goals of the New York Stands with Puerto Rico initiative are detailed in the article *New York Helps Puerto Rico Recover from Hurricane Maria* by Susan Milligan. There was public criticism following Hurricane Maria related to the lack of support Puerto Rico received from the US Federal Government and FEMA. The State of New York, in contrast, was very assertive in their aid for Puerto Rico, largely due to the state’s large Puerto Rican population and aspirations of Governor Andrew Cuomo. The state deployed emergency personnel to the island immediately after the storm, donated supplies and equipment. Immediate efforts set the foundation for over 500 SUNY and City University of New York students to volunteer on the island during 2018. The initiative for students was formed to also be transformative for participants to gain valuable skills while earning university credit.

Successful disaster response and recovery efforts also need collaboration between direct and indirect disaster service professionals as stated by Jason Ford, Vice President of Regional Economic Development at the Greater Houston Partnership in his article *Economic Development Leadership*. Ford explains that the successful response in Houston following Hurricane Harvey was due to the implementation of strong community partnerships, effective volunteer infrastructures, and organized fundraising efforts. Ford delves deeper into the role of economic developers where tasks were expanded to include both recovery and economic resilience when natural disasters happen. Examples include wealth attraction, job retention, and workforce development strategies. He notes that specific economic development tasks help minimize various negative impacts both prior to and after disasters, as well as promote the aftergrowth of strong and resilient communities.

However, not all recount the response to Hurricane Harvey in a positive light. The article *What We Didn't Learn from Harvey* by Mimi Swartz is an account of the destruction that occurred due to the storm in Houston and concerns for the future of the city. With over \$89 billion in federal aid to assist all 2017 Hurricanes, the belief is that individualism, “sluggish” response and a growing threat of climate change will threaten the city. Reflections indicate that future disaster will occur, especially if lessons are not learned from Hurricane Harvey.

Furthermore, *Designing, planning, and managing resilient cities: a conceptual framework*, by Kevin Desouza and Trevor Flanery, explores economic feedback loops present in urban development that can promote the progress of resilient ecosystems. In their study, they introduce several strategies that lead to resilience which are: the assumption of change and uncertainty; nurturing conditions for recovery; and renewal after disturbance. Desouza and Flanery explain that citizen-driven response can be nurtured by creating opportunities that improve social connection, education, and community cooperation.

Disaster Preparation and Recovery: Lessons from Research on Resilience in Human Development, by Ann Masten and Jelena Obradovic, defines and compares studies of resilience. Development, both to both human or ecosystem, can be hindered by trauma that disrupts development. Intelligent resilience that is incorporated into disaster recovery requires high-levels of knowledge integration, information analysis, and an in-depth understanding of how systems operate together. Resilient frameworks are needed for disaster planning and must integrate fields such as science, engineering, healthcare, engineering, and more. Doing so allows an individual to learn from past mistakes to judge future risks and to sustain functionality under pressure.

METHODOLOGY

In the spring of 2018, New York State Governor Andrew Cuomo announced the “SUNY Stands with Puerto Rico” initiative. This program mobilized college students from the State University of New York (SUNY) and City University of New York (CUNY) to join rebuild projects in Puerto Rico that were managed by various “on-the-ground” nonprofit organizations. At the time, the “SUNY Stands With Puerto Rico” initiative addressed an immediate need for direct rebuild services in Puerto Rico. The author of this report, a student at SUNY Polytechnic Institute, was assigned to work with NECHAMA Jewish Response to Disaster, a 501(c)(3) organization that aids with the recovery of homes and businesses impacted by natural disasters. This nonprofit’s methodology was founded on the Jewish principle of “Tikkun Olam,” meaning “repairing the world.”

The primary focus of this paper is to report on the author’s two weeks of fieldwork and the lessons learned while participating in the “SUNY Stands with Puerto Rico” during June of 2018, in San Juan, Puerto Rico. This assignment was an experience-based volunteer opportunity that involved hands-on labor such as concrete scraping, power washing debris, chiseling out of damaged cracks, and re-sealing roof leaks on private homes damaged by the storm. This work involved personal interaction with local property owners and neighborhood residents who were directly impacted by Hurricane Maria and who shared feedback about the relief efforts being carried out. As a result of the “SUNY Stands with Puerto Rico” initiative, in 2018 New York State students reported 41,000 hours of combined service to help restore 178 homes.

While volunteering in Puerto Rico from June 15th, 2018 to June 29th, 2018, the author recorded fieldwork activities, labor work progress, and feedback from conversations with residents in a daily journal. The journal’s input captured a variety of opinions and reflections of all who were involved during the program through observations and testimonials gained while volunteering in San Juan, Puerto Rico. Assets captured by the journal included contemplation on regular faculty-led discussions and lectures regarding the status of disaster recovery, cultural appreciation, and situational awareness.

The author of this report also participated in FEMA’s Emergency Management Institute (EMI) to ensure that the study delved deeper into best practices related to emergency management. The EMI courses utilized are IS-2900.A: National Disaster Recovery Framework (NDRF) Overview that explores the national approach to disaster recovery, and “IS-240.B: Leadership and Influence” that explores how to achieve shared goals during emergency management.

An AmeriCorps Volunteer in Service to America (VISTA) role set the precedent for indirect service methodologies utilized from 2017-2018. AmeriCorps VISTA is a federal volunteer program supported by the Corporate of National and Community Service (CNCS) where members commit a year towards projects at nonprofits & public agencies in the mission of poverty alleviation. As a VISTA, indirect operational tasks are completed to support capacity building. For example, administrative tasks are performed that can leverage both cash and in-kind resources for a nonprofit organization or community.

At the time of the Puerto Rico trip in 2018, the author was finishing a 1-year assigned role as a VISTA Leader supporting the US Economic Development Administration (EDA). Duties included the management of volunteers, designated to specific regional communities, to fulfill the EDA's mission of leading "the Federal economic development agenda by promoting innovation and competitiveness, preparing American regions for economic growth and success in the worldwide economy." By leading the VISTA team's professional development goals, progress was made to support regional economic development, with an emphasis placed upon sustainable and resilient strategies. FEMA's National Preparedness Goal defines resilience as "the ability to adapt to changing conditions, as well as withstand and rapidly recover from disruption due to emergencies."

RESULTS

Numerous skills were gained by participating in the "SUNY Stands with Puerto Rico" initiative including: adapting to challenging situations, collaborating with teammates from diverse backgrounds, and to accepting multiple levels of program's intent when working in vulnerable communities.

Understanding how to adapt to challenging situations was a main theme of the Puerto Rico service project. During the weeks leading to departure, many program changes had to be made which impacted the trip's logistics. Some examples included modifications to the project's service dates, switching the nonprofit organization that would host our specific group, and continuous revisions to the project's work scope requirements. With all these requirement changes, it became important for the group members to retain a sense of flexibility of expectations since on-the-ground assignments would likely change daily. Although team members had prior experience in construction work before deployment to Puerto Rico, many had to quickly adopt a new set of skills required for major roof repair.

When assigned to project site in Puerto Rico, the cohort had to be prepared for surprises that would impact daily tasks. For example, sudden rain storms would require the shift of daily priorities. In addition, there were instances where tools would malfunction or break. This would require changes to how tasks at hand would need to be completed. Furthermore, the team of volunteers performed their tasks in very hot and humid conditions. Because the physical labor was intensive, frequent breaks were required to ensure the team could be productive and endure long workdays.

To complete a multitude of challenging rebuild projects in ever-changing work conditions, teammates within the cohort had to be interdependent on each other for needed support. Extensive roof repair could not be completed without an elevated level of team collaboration. Individual volunteers would take turns removing old concrete, sealing cracks, removing debris, and cleaning equipment. Strong teamwork was crucial to guarantee that proper levels of work safety were maintained. SUNY students came from different regions of the New York state, from where they brought a variety of unique life perspectives from different areas of study. Successful team cohesive was the result of the student's ability to learn and trust one another which allowed them to achieve the common goal being successful in their disaster repair efforts while stationed in Puerto Rico.

Building trust from within the communities being served was also necessary for the initiative to be successful. Being New Yorkers working within various Puerto Rican neighborhoods, it was important for

students to work with a strong purpose and resolve, as for many resident's homes and businesses had been ravaged by the storm. As ambassadors from our respective universities, it was our duty to clean up the construction site before leaving, to treat homeowners with dignity, and to be accountable for all issues that arose.

One local homeowner expressed tears of gratitude after her roof was repaired. She was thankful that there were no more leaks after months of living in a damaged home. She went on to tell her neighbors about the repairs on her home. These neighbors would eventually request services from the nonprofit NECHAMA. Through the application of intentionality during the assignment work, deeper connections and trust was instilled with local Puerto Rican homeowners. Word-of-mouth marketing led to new leads for services requested.

After two weeks of direct service in Puerto Rico, personal outputs achieved were seventy-six total hours of direct service committed towards disaster repair, while working on a team that repaired roofs on three homes. SUNY students embraced the challenges and trusted new teammates. A new level of professionalism was established by being intentional in the field. A progression towards more resilient Puerto Rican nonprofits was observed with lessons learned in the face of demanding projects.

A crossover in skills acquired between direct service in Puerto Rico and AmeriCorps VISTA service is displayed while performing indirect capacity building services. For example, my volunteer assignment managed volunteers deployed to regional communities with their own economic opportunities and threats. To fulfill a successful VISTA year, an individual must face the adversity of living on a stipend in a temporary volunteer role. Beneficial practices that applied to both direct volunteer work in Puerto Rico and indirect service as an AmeriCorps VISTA were inspired by the novel, *The Student Leadership Challenge: Five Practices for Becoming an Exemplary Leader*. This novel was assigned reading for the cohort of SUNY students that volunteered in Puerto Rico during the summer of 2018. Practices highlighted in the book include modeling new frameworks to measure results, executing a shared vision for volunteers, updating work processes, empowering volunteers during challenging situations, and inspiring volunteers to make more community calls during projects.

The outputs of the author's 2017-2018 VISTA Leader year were over \$1,000,000 in combined in-kind and cash resources that were leveraged through successful grants and donations. The author helped manage volunteers that implemented regional economic development strategies and hazard mitigation plans. In addition, the author completed 30 hours of "mucking and gutting" direct disaster services in South Texas during the summer of 2018.

Following the service year as an AmeriCorps VISTA, an opportunity arose to fulfill a temporary role at the EDA, specifically related to disaster recovery. The role involved the processing of disaster funding opportunities in communities impacted by Hurricane Harvey. The author applied both experiences from the direct service opportunity in Puerto Rico and the service year as an AmeriCorps VISTA to adapt to the new full-time position. Although the newly acquired position to support the EDA did not involve direct repair services on homes, it did support the administration of recovery dollars invested in the community for construction, infrastructure, and technical assistance recovery projects.

A PATH FORWARD

SUNY Stand with Puerto Rico is a student volunteer program that sent over seven hundred state students to Puerto Rico for disaster recovery during the summer of 2018. This program was an example of an effective recovery volunteer program that saw joint partnerships with State government, local universities, and nonprofit organizations. The program led to the professional development of students through direct service. The SUNY Stands with Puerto Rico program is an offshoot of the New York Stands with Puerto

Rico effort, which was started in 2017 following Hurricane Maria. The state-led program helped deploy professionals and supplies to impact regions. University professionals reading this article may consider SUNY Stands with Puerto Rico as a model for implementing successful disaster recovery programs.

This article gives identifies steps that university professionals can take to develop the capacity of a successful student volunteer program. The developed student volunteer program should include both indirect strategic planning and direct student engagement in the impacted area. Student volunteer programs can be initiated at any college level, in the United States, and abroad. Actionable steps can be seen as the following activities: (1) resource map development; (2) complete a needs assessment; (3) strategize with a timeline; (4) execute project steps; and (5) feedback loop.

The first step is resource map development to identify key inputs toward program development. Secondary research is to be utilized to identify organizations that work in disaster recovery, the location of where the potential partner organization operates, the type of organization (nonprofit, faith-based, governmental), the organization's mission and a brief synopsis of their work, and primary points of contact for the organization. Primary research can be conducted by reaching out to points of contact at potential partner organizations to set up site visits or informational interviews. Take special note to identify philanthropic groups or project donors. State and Federal programs may also offer integration efforts to financially support student volunteer programs.

The second step is to complete a needs assessment which can be conducted simultaneously to resource map development. University professionals looking to begin a student volunteer program can utilize in-depth research to identify key stakeholders. Potential project partners working on the ground in the disaster impacted are can support the work of students. Be sure to initiate joint communication with the existing rebuild efforts in impacted areas. Create a document compiling the identified needs of organizations and stakeholders to see if a student volunteer program can fill such a gap.

While developing a needs assessment, university professional should begin to identify the scope of work to be completed during a student volunteer mission. Ensure that students are qualified for the type of recovery work needed to be completed. Both human and equipment resource needs should be identified and budgeted for. Consider partnering with other schools and their study abroad programs or career centers. Consider building a syllabus for credit-earning electives or independent studies that students can apply to degree earning programs.

The third step is to strategize with a timeline to develop programmatic logistics. Items to include in this framework include the timeframe to initiate fundraising, program promotion, student recruitment, to set the deployment dates, and to create travel itineraries. In the development of the program, safe and reasonable accommodations for students should be setup. Examples of student residences during service include partner school campuses, faith-based organization, or local host families. The initial project steps, programmatic goals, duties for leadership roles, volunteer assignments, and target initiation dates should be set during this step.

The fourth step is to execute the project steps. At this point, the student volunteer program transitions from strategic planning to direct community service. Project coordinators should assign the primary team leaders, university chaperones, and points of contact for the service trip. The team leaders will oversee creating communication channels, setting meeting times, and scheduling deployment exercises. Prior to departure, a daily agenda should be drafted along with a list of key milestones to be accomplished chronologically over the course of the volunteer assignment. During deployment to a project site, student volunteers should be split into project teams to accomplish the identified recovery tasks in the impacted community. Direct service initiative could be distributing supplies, site clean-up, and critical repairs. Special attention should be paid to safety and self-care. While working, it is important to hydrate and to

regular break during demanding labor. At the end of each workday, all teams should congregate to reflect on work accomplished during the day.

The fifth step is to set up methodologies for a feedback loop that ensures that the student volunteer program can improve and continue to hit recover needs. Prior to service, program coordinators should set up key performance indicators to gauge the project's progression. Examples include volunteer hours committed or the total number of jobs completed. Both quantitative and qualitative results should be tracked and recorded. A suggestion would be for student volunteers to keep journals to record daily entries or to contribute to online forums, internet access permitting. Surveys can be utilized to assess each participant's experience, lessons learned, and professional development because of the student volunteer program. The outputs collected can be used to validate future results and to benchmark the success of the new student volunteer initiative.

ASSESSMENT

The assessment of student volunteer programs should focus on (1) ability to meet key performance indicators set before deployment, (2) the attainment of qualitative research and testimonials, and (3) the collection of follow-up surveys to assess the longer-term impact of a program.

The first step in the assessment process is to measure the outputs of the key performance indicators set while building the capacity of the program. During both the needs assessment and timeline development phases, project coordinators are to create quantitative goals to be achieved by project completion. Examples include the target number of volunteers recruited, the number of hours dedicated towards the mission, or the number of activities completed over the course of the project. These results can be tallied in a chart or listed in a report for reference.

The second step is to collect qualitative research and testimonials during and after the mission trip. Such feedback set the scene for the activities that occurred during the project. Included can be success stories and records of interactions with stakeholders in the impacted region. This step can include pictures from the volunteer site. Course work can be set up before or during the trip. A final project can be included in the syllabus of coursework to encapsulate the totality of experience-based learning. Project coordinators can get creative at this step in the assessment process to build interactive final projects. Qualitative research can integrate with various topics that relate to economic development, disaster management, healthcare management, information systems, education, energy management, and other career pursuits. There is the opportunity to spur discussions around next steps towards resilience and long-term development.

The third assessment step is to initiate surveys that gather volunteer feedback on the impact of programs and areas to improve the program. Leadership competencies can be developed while working in new and challenging conditions. The survey can occur directly after the project or several weeks after completion. Student volunteer programs can advance further educational and career pursuits, as shown in this paper. Experience-based educational opportunities run by universities have tremendous potential to enrich lives with meaningful work and inspire future professional endeavors.

A multidimensional assessment of a student volunteer project is enabled through assessments. Program coordinators can then synthesize results with the intent to scale operations for future deployments. Both quantitative and qualitative results should be captured, along with longer-term assessments to gauge the impact the volunteer program had on a student's professional development.

CONCLUDING COMMENTS

Disasters and their destruction can be unpredictable and destructive often leaving communities completely uprooted. After damaging tropical storms, like those that hit the United States in 2017, important leadership is needed to effectively respond, repair, and provide recover to the catastrophic area. According to FEMA a leader is, “someone who sets the direction and influences people to follow that direction.” The goal of this paper is to show how participation in student volunteer programs can lead to new career opportunities, as well as a path forward towards the creation of effective student volunteer programs. This study uses the SUNY Stand with Puerto Rico initiative as a model. Results are collected through the author's observations as a student volunteer and as an AmeriCorps VISTA.

This study provides the support that direct services build indirect leadership competencies that can advance one's career. However, this study report is based solely on the author's personal experience when working on projects in the fields of disaster management and economic development. Some limitations of this study are that work occurred only in the United States through New York state schools. and that the study did not delve into any healthcare and education direct services. The report also did not survey other volunteers working in Puerto Rico. It may be possible that the correlation between direct service and career advancement in indirect capacity building work may be related to other factors such as the individual's educational background or socioeconomic status. Future research could include the creation of more intensive fieldwork and/or conducting an empirical study with statistical analyses that would show how student volunteers advance their careers after service.

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BIOGRAPHY

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