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Copyright © 2018 by the University of Georgia.elSSN 2164-8212 From the Editor ... A Scholarly Feast

Developing this issue of *JHEOE* and carefully watching each article come together and move toward publication is a bit like preparing a community potluck with many dishes and flavors to sample and share. This issue is especially "flavorful" with one our most diverse collections of articles looking at community engagement from "boots on the ground" research studies to essays that dream of retooling higher education in ways that build upon the best practices and theories that engagement has to offer.

For our first course, this issue opens with essays posing provocative questions about ways university-community engagement can and should address global challenges and concerns in sustainable and ethical ways. In our first essay, Brown, Chaudhari, Curtis, and Schulz explore a long-term partnership between Northern Arizona University and a Tibetan refugee community in India. In their exploration of the Mainpat Project, the authors delve into the complexities of cross cultural communication, building longterm and long-distance relationships, and navigating governmental obstacles when developing multidisciplinary projects with vulnerable international communities.

Mossman then builds on all of these issues with her essay challenging universities to consider how interdisciplinary work can help U.S. universities and colleges better prepare students for the future workforce by addressing global sustainability challenges through problem-based learning. The author proposes weaving interdisciplinary community engagement into general education as a sort of "retrofit" of higher education learning outcomes. Further, the author suggests featuring problem-oriented research connected to industry and community partners that would be responsive to pressing local and global needs.

For our main course, a trio of research articles in this issue explore civic engagement across a spectrum of programs, activities, and community-based research. Leading off this section, Engberg, Carrera and Mika's study of undergraduate students who participated in the Target New Transitions (TNT) program in the Chicago schools, looked at the impact of TNT on these academic coaches' understanding of social justice issues and interest in public service career paths.

To further consider ways to get students more civically-engaged and oriented to public service careers, Hylton's study examines the connection between the development of civic literacy and social empathy, and increased civic engagement among college students. Finally, McElfish et al.'s article, *Assessing Community Health Priorities and Perceptions About Health Research*, discusses findings from a survey of over 3,100 respondents who were asked to identify their top health concerns, and also indicate their willingness to participate in health research studies, with a particular emphasis on minority participation in health research. This study has implications for community-based researchers because it confirms that there is interest among minority communities where health disparities might exist to participate in health studies, particularly when community-based research methods are employed.

In a reminder that some community engagement work has high stakes and requires timely, responsive, and committed approaches, one of this issue's featured Project With Promise articles grapples with one university's response to America's heroin epidemic that has hit the the northern Kentucky area especially hard. Langley-Turnbaugh and Neikirk examine an ongoing, multi-faceted engagement initiative by Northern Kentucky University to educate and develop evidence-based interventions designed directly to address the ongoing opiod crisis. In discussion of another project designed to increase public safety, Ferrandino then analyzes the Northwest Indiana Public Safety Data Consortium (NWIPSDC), a universitycommunity partnership that provides GIS data to provide real time data to police departments in the region.

For a delicious treat, on occasion, *JHEOE* is very pleased to publish dissertation overviews, which are meant to highlight the work of emerging scholarly voices conducting research related to university-community engagement. We welcome these submissions from any discipline or area in the field of university-community engagement, public scholarship, and the scholarship of engagement. This issue features an overview contributed by Molly J. Wickam on her recent mixed-methods dissertation examining the impact and alignment of service-learning in business capstone experiences on students' employability skills.

The cherry on top of this issue of *JHEOE* once again features a number of book reviews that look at a wide range of issues through methods that put community engagement under the "microscope" to examine institutional implementation issues, or ask us to peer through a "crystal ball" that reveals a revolutionary future for universities building on community-engaged strategies. Townson leads off this issue's book reviews with an examination of *Engaging Higher Education: Purpose, Platforms, and Programs* for Community Engagement by Marshall Welch. As the title suggests, Welch offers a practical guide and recommendations for ways colleges can successfully support and implement community engagement centers and activities based on a wide body of institutional research that includes, among others, a national study of Carnegie-classified community-engaged institutions. Next, Glass reviews Benson, et al's Knowledge for Social Change: Bacon, Dewey, and the Revolutionary Transformation of Research Universities in the Twenty-First Century. This volume takes a deep dive into the intellectual and cultural history of community engagement in American research universities and proposes a radical political project that would "transform" these research institutions through the creation of strategic, sustainable partnerships. Finally, Nancy Franz reviews Stoecker, Holton, and Ganzert's edited volume, The Landscape of Rural Service Learning, and What it Teaches Us All, an important work that seeks to fill a glaring gap in scholarship focused on service-learning in rural America.

As you sample the articles in this issue of *JHEOE*, we are mindful that it takes many hands to prepare each issue for publication. As always, we thank the authors, peer reviewers, and associate editors of articles in this issue for their role in contributing to the growth of scholarship in the field and for preparing such a hearty feast of scholarship in this issue. Enjoy!

With best regards, Shannon O'Brien Wilder Editor

Reflective Essays

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Service-Learning with Tibetan Refugees in India: A Small University's Experience

Betty G. Brown, Lisa Shanti Chaudhari, Eric K. Curtis, and Leslie Schulz

Abstract

In response to requests for assistance from a Tibetan refugee community in Mainpat, India, Northern Arizona University developed a unique service-learning experience, the Mainpat Project, to provide health and other services. The project continued for 4 years despite the limited infrastructure and resources of a small public university and the complexities of working with a host community in a remote area. The Mainpat Project brought together community leaders and multidisciplinary teams of students, faculty, and staff. Based on various types of assessments, observations, and direction from the community, activities focused on needs identified by the Tibetan refugees and interventions to enhance their quality of life. This reflective essay presents results of an exploratory study of community needs, community-university interactions, interventions built on new understandings, challenges, intended and unintended outcomes, and lessons learned from this experience. Proposed strategies for future work in Mainpat build upon existing models of global service-learning.

Keywords: Buddhism, global service-learning, India, multidisciplinary, remote, rural, Tibetan refugees

Introduction

Go forward today with good intention, to do good to all sentient beings as your motivation. (*Tulku Tsori Rinpoche, personal communication, December 22, 2012*)

Iobal service-learning partnerships are complex endeavors for both the host community and the academic institution. Meaningful service-learning stems from communitydirected priorities and partnerships based on trust and mutual respect, with the goal of equitable outcomes for all stakeholders (*Quaranto & Stanley, 2016; Williamson et al., 2016*). Americans, especially those in academia, come from an indisputable position of privilege and have too often entered a host community with idealism and an incomplete understanding of the community's needs and cultural context (*Mellom & Herrera, 2014; Tilley-Lubbs, 2009*). The benefits of such encounters have often been one-sided and have reinforced inequalities (*Hartman, Paris, & Blanche-Cohen, 2014*). The term *service-learning* is itself skewed toward the academic side. It is the responsibility of the university partners to be open and responsive to unfamiliar ways of thinking and adapt to the community's context if the desired outcome is an equitable and sustainable community-driven process.

The experiences of Northern Arizona University's (NAU) Mainpat Project—a multidisciplinary response to Tibetan refugees' requests for health and other services-highlight the challenges of community-university collaboration in a remote area of India. This reflective essay presents the results of our exploratory study of community needs and potential for community change. Taking a constructivist approach, NAU students, faculty, and staff built understandings of the refugee community through gathering data (e.g., through a needs assessment and informal discussions), developing culturally determined interventions that evolved from that exploration, and reflecting on those transformative experiences to guide work in Mainpat and in their future careers. This essay explains the status of Tibetan refugees in India, the relevance of Buddhism in their survival in exile, and the character of the Mainpat Tibetan Refugee Settlement. A description of the Mainpat Project includes discipline-specific interventions and the challenges of working in a remote, culturally diverse area, and it unpacks the concepts of community and culture. Lessons learned focus on the complexities of multidisciplinary service-learning planning in a small public university's environment and the interface of a diverse host community in India with an American academic team.

Global Service-Learning

Global service-learning opportunities have increased in recent decades. Students who experience the global environment through immersion service-learning projects acquire a multidimensional increase in cultural competence and personal growth *(Bringle, Clayton, & Hatcher, 2013; Kiely, 2004; Nickols, Rothenberg, Moshi, & Tetloff, 2013)*. Universities include global learning as a focus in mission statements *(Whitehead, 2015)* and explore the benefits of purposeful placement of service-learning within their programs *(Phillips, Bolduc, & Gallo, 2013)*. Online service experiences promote new ways of involving the students of the technological age and are increasingly integrated into university curricula *(Waldner, McGorry, & Widener, 2012)*. Recent research includes a deeper look at the interface among community, student, and university partnerships (*Chupp & Joseph, 2010*) and a shift of focus from community needs to community assets (*Lieberman, 2014*). Nevertheless, an understanding of the impact of service-learning on communities is incomplete or perhaps unpublished, and projects do not sufficiently promote community resiliency and self-empowerment (*Reeb & Folger, 2013*).

The voice of the host community needs to be at the core of service project planning and implementation, but achieving this goal is complicated by the power and privilege that the university holds in this relationship. Bortolin (2011) argues that honest selfawareness is needed in academics' stated goals for community relationships. If the primary purpose of community service-learning is to benefit the university, this should be acknowledged. If not, then the academic partner needs to engage "with communities with every effort to partner mutually with, and to the equal benefit of, our communities" (Bortolin, 2011, p. 56). The "give and take" in a reciprocal relationship is not feasible in most service-learning contexts that sustain a "relationship between server and served" (Keith, 2005, p. 7). Nevertheless, there are exceptional models and recommendations to reduce the inherent inequities between communities and the universities that attempt to work with them (e.g., Coleman & Alonso, 2016; Crabtree, 2013; Hartman et al., 2014; Piacitelli, Barwick, Doerr, Porter, & Sumka, 2013). There is a paucity of literature, however, that addresses the complexities of working directly with refugees and small universities' attempts to implement these strategies in very remote areas of the globe where political and social unrest, food insecurity, and severe poverty and unemployment are the norm.

Tibetan Refugees

Tibet, unlike its southern neighbor India, was never colonized or modernized by a European power (*Aran, 2009*). In the early 20th century, however, Britain invaded Tibet to gain a foothold in the region, purportedly to establish trade across the Himalayas, but also to hinder Russian expansion in Asia and protect British interests in colonized India. Some argue that this "Great Game" between the superpowers enabled China's annexation of Tibet in the 1950s (*McKay, 2012*). The Chinese toppled Tibet's feudal theocracy headed by the Dalai Lama and dissolved the Kasha, its governing body. The Tibetan nationalist response to Chinese colonization was immediate and persistent resistance. After a failed 1959 uprising, Tenzin Gyatso, the 14th Dalai Lama, slipped over the border to India. Many Tibetans have followed (*Aran, 2009*). The Dalai Lama organized a government-in-exile, the Central Tibetan Administration (CTA), in Dharmasala. The CTA established 58 Tibetan refugee settlements: 12 in Nepal, seven in Bhutan, and 36 in India (*Central Tibetan Administration [CTA], n.d.b*), the latter guided by the Indian government, which intentionally placed refugee settlements in remote locations (*Houston & Wright, 2003*).

Tibetan uncertainties are magnified by the precariousness of their political situation. Although the Central Tibetan Administration provides them some protection, Tibetans and their offspring are rarely able to become Indian citizens, even after more than 50 years in exile. Tibetan refugees in India are left without a nation, unable to acquire an Indian passport, and considered "foreign guests" (McConnell, 2013, p. 968) of a government that compels them to reregister for residence permits every year, requiring them to travel far in many cases. These permits allow Tibetans to move freely within India, and they may open bank accounts and initiate businesses (McConnell, 2013). Without Indian citizenship, however, refugees have not been able to buy land, take out loans, gain access to expensive universities, or get good jobs. The exiles live in constant fear of deportation and political imprisonment (Falcone & Wangchuk, 2008). This changed in October 2014. The Indian government's Tibetan Rehabilitation Policy 2014 clarifies that Tibetans may now "undertake economic activity and to that extent, relevant papers/trade license/permit may be issued to them" (CTA, 2014, para. 3). This policy directs individual states to sign new 20-year revocable leases on land occupied by Tibetan refugees throughout India (Government of India, Ministry of Home Affairs, 2015).

Despite the relative protection of isolation, Tibetan émigrés suffered serious hardships. Tulku Tsori Rinpoche, who was born in India and founded the Mainpat Tsori Monastery, recounts being kidnapped as a child and sold into slavery. Indeed, many Tibetan refugees report traumatic experiences: survival trauma, which includes scarcity of food, medical care, employment, and housing; ethnic stress, which encompasses both discrimination and worry over loss of culture and identity; and uncertainty, which involves feelings of deprivation, injustice, and insecurity about the future (*Hussain & Bhushan, 2011*). Tibetan refugees suffer considerable psychological distress subsequent to their traumatic experiences in Tibet (*Sachs, Rosenfeld, Lhewa, Rasmussen, & Keller, 2008*), though some literature suggests that ethnic Tibetans born in exile experience fewer depressive symptoms than those who were born in Tibet and escaped to India (*Evans et al., 2008*).

The Buddhist Connection

One important factor that promotes coping and mitigates the stress of the dispossessed is Tibetans' intense devotion to Buddhism (*Hussain & Bhushan, 2011; Marwah & Soni, 2010*). Buddhist unifying values create a cultural commonality, psychological anchor, and social bond that give meaning to traumatic situations and enhance Tibetans' ability to adapt in exile. Tibetan Buddhism has a distinct personal orientation revolving around lamas, the relatively few monks who have attained the highest levels of spiritual mastery. Lamas act as guides, teachers, interpreters of experience, and shamans (*Aran, 2009*). An incarnate lama may be given the honorific title of Rinpoche (literally, "precious one"), as is the case in Mainpat.

Tulku Tsori Rinpoche is the spiritual leader of the Tsori Monastery, which serves as both the religious and political hub of the Mainpat Refugee Settlement. He also heads a foundation based in Miami, Florida, Yogi Tsoru Dechen Rinpoche Foundation (YTDR), and travels the world to raise funds to increase the Tsori Monastery's capacity to educate young monks, promote the preservation of Tibetan culture, and support the Mainpat community.

The Mainpat Project

Mainpat Tibetan Refugee Settlement. The Mainpat Tibetan refugee settlement was established in 1962 (*CTA*, *n.d.a*). It consists of seven villages, referred to as camps, about 50 kilometers from the nearest town, Ambikapur, in the state of Chhattisgarh, which is reached via a dirt road, usually by riding the daily bus, hiring a jeep, or driving a motorbike. Like many parts of India, Chhattisgarh is composed of many indigenous communities. The Indian communities adjacent to the Tibetan camps represent multiple discrete cultures. Hindi is the national language, but most people speak a Chhattisgarhi dialect, as well as local tribal languages, such as Telugu and Odia.

The Tsori Monastery, near one of the camps, includes a dormitory for young male monks in training, a temple, classrooms, and several other structures. This was the location for the annual visits of the NAU team, whose participants camped on the monastery grounds, gathered in the temple to listen to *Dharma* talks given each morning by Rinpoche, and became immersed in the Tibetan Buddhist culture.

The Indian government allows the Tibetan refugees access to plots of agricultural land. Interwoven between these Tibetan-run parcels are small Indian villages, although this separation may be no more than the dirt road; the demarcation is easily detected visually by the presence of Tibetan Buddhist prayer flags, both ubiquitous and paramount to Tibetan culture (*Gold*, 1984). In contrast, most Indian people are Hindu.

In the winter's dry season, the roads are easy to navigate, and many of the young adult Tibetans travel to large Indian cities to engage in sweater selling or clothes trading (*Prost, 2008*). During this colder and drier season, the elderly continue to live at home. Younger school-aged children often attend Tibetan-run schools in other parts of India. During this time, the fields produce crops, typically buckwheat, mustard, and Niger seed, that are harvested and prepared for sale. Many of the local native residents work the fields, not the Tibetans. During the rainy season, roads become difficult to traverse. Farmers plant rainy-season crops, such as rice. Health problems associated with standing water, especially malaria, increase. It should be noted that the Mainpat Project did not take place during the rainy season, nor did the project team directly observe the extent of change in landscape and the shift in community needs at this time.

The ultimate, highest form of generosity is the giving of wisdom—*dharma*—to eliminate most causes of suffering and to eliminate ignorance. (*Tulku Tsori Rinpoche, personal communication, December 22, 2012*)

Development of the Mainpat Project. In 2010, Rinpoche's travels took him to Sedona, Arizona. During this trip, he brought to the forefront the plight of the Mainpat refugees, especially the lack of health care and the risk of rabies spread by the large population of free-roaming dogs. In response to his request, a volunteer group of health care providers and specialists in rabies eradication assembled and went to Mainpat. Representatives from NAU joined in this initial commitment.

In the 50-year existence of the Tibetan refugee settlement at Mainpat, no one had provided dental care. Additionally, two wind turbines that had been donated by another agency were in place but not connected to a generator and, therefore, not capable of supplying energy. Tulku Tsori Rinpoche invited NAU to provide support that would enhance the quality of life of the Mainpat refugees and the people at the Tsori Monastery.

This was an opportunity for a life-altering educational experience for NAU students and faculty. A novel model conceived by NAU, the Mainpat Project, attracted faculty and staff from all academic colleges at NAU. College deans across campus learned of this multidisciplinary global service-learning project from the dean who participated in the original trip. Initially, three colleges-Health and Human Services; Engineering, Forestry and Natural Sciences; and Social and Behavioral Sciences-volunteered to participate. Professors obtained NAU institutional review board (IRB) approvals for research, and the deans put up funds to support their respective teams (dental hygiene, sustainable communities, and mechanical engineering) for the first trip in December 2011. The project continued through 2015 with participation from different colleges and departments, depending on funding and interest. Every year, 2011 through 2015, approvals for NAU's visits and service were obtained from Tulku Tsori Rinpoche, and through him, approvals from the seven camp leaders and community clinic director; the local Indian governmental office; the government of India: and the Central Tibetan Administration.

Each year, 15 to 32 students, faculty, staff, and American community volunteers visited Mainpat. The composition of the groups varied from year to year based on the changing nature of the community's needs and departments' shifts in funding priorities. Faculty and students devised smaller, innovative strategies for funding, including student-initiated fund-raisers and solicitations for donations from local and regional community partners. Colleges and some funders also supported underrepresented student participation, enhancing student access to a costly program.

Despite NAU's limited infrastructure, the university is uniquely situated to work with culturally diverse communities, and this academic culture enhanced faculty and student preparation for the Mainpat experience. For example, due to its proximity to American Indian nations, NAU's Center for American Indian Resilience (CAIR) works in tandem with tribal communities to examine community assets (such as elders' wisdom), build capacity and resilience, and apply knowledge from research to benefit regional communities in culturally appropriate contexts. Their projects support NAU students as they engage with their communities to apply the knowledge and strategies that they have learned (*CAIR*, 2017).

Predeparture preparation. To prepare for the project, faculty in each discipline selected students from pools of interested candidates through a competitive application process. Screening criteria included demonstrated success in their academic programs, experience in community-related projects, cultural competence in working with diverse communities, and a clear commitment to a team-based, multidisciplinary approach to service-learning. Professors obtained IRB approvals for the initial needs assessment and collection of health data in Mainpat. Other professors and community members with various expertise offered educational in-services and cultural competency training to the entire group. Topics included both Tibetan and Indian history and social structures, Buddhism, infectious diseases and vaccines, the correct use of pit toilets and other logistics, and the use of the Mainpat Project's blog and online platform (Blackboard Learn) for sharing information. Students in each discipline sought donations or conducted fund-raisers to obtain supplies. Participants obtained passports and visas that needed to be approved by the Indian government so that they could then apply to the Central Tibetan Administration for Protected Area Permits (PAPs) to access the refugee settlement. For a large group of students and faculty, this process took 6 to 9 months. In 2014, PAPs could be obtained from the Indian government directly, and this facilitated the process. After arrival at the Mainpat settlement, the local government's administrative office verified participants' permits before they began their work.

Travel to a remote area. Work in a remote area poses logistical challenges, but the journey itself is a significant part of the learning opportunity. When it takes 32 hours of airline, bus, and jeep travel with medical, dental, and engineering supplies over difficult terrain, students and faculty come to appreciate the level of separation experienced by some people, like the Tibetan refugees, from the rest of the world. On return trips, the project team went through Varanasi, considered the spiritual capital of India, where, at nearby Sarnath, now an important pilgrimage site, Buddha delivered his first sermons after gaining enlightenment, and where Hindu funeral rites are performed on the shores of the Ganges. Although brief, this 3-day visit afforded a glimpse into Indian culture.

Discipline-specific interventions. Over the next 4 years, NAU sent teams of students and faculty mentors from the fields of dental hygiene, nursing, physician assistant studies, public health, engineering, sustainable communities, forestry, photojournalism, English, and business. Faculty and students from the NAU sustainable communities' graduate program conducted a needs assessment prior to planning community interventions. They collected data from all seven camps and reported responses from over 50 qualitative interviews with Tibetan refugees and camp leaders. The refugees identified issues that revolved around energy, deforestation and fuels, safe water, organic gardening, infectious and chronic diseases, and economic development.

The students and faculty in the health professions provided care both to the Tibetan refugees and to residents of the Indian communities who came to the clinics. The dental hygiene team members were in continuous demand. Each year they served between 350 and 400 clients in 7 days, including the 54 monks at the Tsori Monastery. Dental hygiene students and faculty provided cleanings and fluoride treatments, and assisted the dentist with extractions and the treatment of dental caries, as well as periodontal and other diseases. Nursing students completed health screenings and created electronic records of baseline health data that they gave to the Tibetan nurses for their records. They conducted vision clinics where they distributed reading glasses and sunglasses, and they addressed health complaints such as back pain and joint pain. Physician assistant students also provided health screenings and distributed medications, including typhoid vaccinations, vitamin A supplementation to children under 5 years of age, and albendazole to treat gastrointestinal parasites. They referred severe cases of some diseases, such as active tuberculosis, to a regional hospital. Public health students offered education on the prevention of HIV and other sexually transmitted infections, reproductive health, water sanitation, diet, diabetes management, and infectious and chronic disease prevention. They also provided rabies education and assisted an acupuncturist with a pain management clinic.

Other project teams responded to needs identified by the community. The environmental engineering team assessed the drinking water collection and distribution system at selected points for water contamination. The mechanical engineers developed and expanded the solar electrical system at the Tsori Monastery and trained several of the older monks in basic problem management and repair. The solar energy source provided power to light half of the Tsori Monastery by the end of the visit. The engineers plan to expand access to energy to the rest of the settlement. The forestry team was also involved with energy, primarily with concerns around the rapid depletion of wood for fuel. They compiled data on agroforestry techniques and deforestation, and they provided educational sessions on caring for and protecting trees. Rinpoche reported that the loss of Tibetan culture was a problem and suggested ways to promote its preservation. As a consequence, the photojournalism team used photography, interviews, and videotaping to produce several documentaries to preserve Tibetan culture and educate potential funders. As per Rinpoche's request, the graduate student in English taught English reading skills to the monks and the children in the area, and the business school assessed economic infrastructure.

A multidisciplinary family emerged as students from different disciplines worked together on each other's projects. During some years, a multidisciplinary debriefing and information exchange helped students adapt approaches and anticipate needs for subsequent outreach and clinics. For example, the forestry team explained a framework for understanding the health impact of land use to other project participants. The nursing team joined public health students to explain a low-cost birth control technique to the Tibetan staff at the Indian hospital. One nurse said that she would make a poster about the technique to explain to clients and other staff. To manage one dental clinic that was overwhelmed by an influx of young Indians from a neighboring school, the dental hygiene team faculty leader trained the public health team to administer fluoride treatment, and the yard of the meeting house outside the clinic area served as an expanded-scale "clinic" for these patients.

Project Challenges

The project participants entered the Mainpat Project with an honest intent to respond to the community's requests for assistance. The group's ignorance of the complex and shifting social and political structure, however, diminished the potential benefit. The situation posed an even more important question: Did the Tibetans want the project team's services? Though they thanked the participants multiple times for coming and for the services provided, it is possible that some refugees felt obligated to be polite to foreigners who had traveled thousands of miles, or to honor the wishes of community leaders. The impact of privilege and decision-making power became obvious. There may also have been problems with translation, particularly during the needs assessment. How much did participants from the host community feel comfortable saying in front of their leaders and the interpreters? Each of the seven camps had a leader, and members continually referred to the position or opinion of their leader rather than sharing their individual opinions.

Community participation in planning. Community participation during the preparation phase was essential, but communication to organize the trip and plan with the community was challenging between visits. Rinpoche made several trips to the United States and met with the project participants to review and approve ideas for intervention. In the months following his trips, however, there would be no response to inquiries, and it is doubtful that any community involvement took place beyond the monastery. Rinpoche made trips to other sites, including locations in Nepal, for which he was responsible. During that time, telephone and Internet communications were impossible. His secretary, who was a key connection in providing information, died of malaria during the initial stages of the implementation of the Mainpat Project. There were no backup contacts in India with whom to plan. Even when Rinpoche was in Mainpat, other pressing needs, such as damage to the Tsori Monastery and community structures caused by the typhoon in 2014, required his full attention. Based on limited information, then, the project team often had to make an educated guess as to the next year's most pressing issues.

Concept of community. The project team worked with Rinpoche to determine initial priority needs. Rinpoche's role as both a religious and political leader made him an important gatekeeper and negotiator with the Central Tibetan Administration, the camp leaders, and the local Indian government. The needs assessment conducted in 2011 also provided guidance for prioritizing the Tibetans' problems, but it provided little information about the status of the Indian communities. Compared to the Tibetan refugees, local Mainpat Indian communities are at an economic and social disadvantage. Indian communities adjacent to the Tibetan camps had needs as well, but some communities had a strained relationship with the refugees. Living conditions around Mainpat are extremely poor, and there are few opportunities for employment. Rural inhabitants are now migrating to urban areas like Mumbai and Kolkata in search of work, which further complicates existing problems (Abbas & Varma, 2014). This rural-to-urban migration occurs in both the Indian and Tibetan communities. The initial population of Mainpat was approximately 2,000 (CTA, *n.d.a*) but is dwindling as more and more young people leave the settlement.

At first, political antagonisms strained the issue of providing services to the Indians. In the first year of the Mainpat Project, an Indian family brought their daughter to the clinic. She was very sick, and the medical team could do nothing for her other than recommend that she be taken to the hospital. She died later. This prompted the question: If something goes wrong, what are the repercussions and for whom? After the NAU team leaves, what do Rinpoche and the local community leaders have to deal with? Rinpoche wanted to help both Tibetan and Indian communities but did not want to increase preexisting misunderstandings and tensions.

Ultimately, however, Rinpoche supported offering services to any of the Indian communities who requested them. The NAU health providers supported this decision, but it complicated planning in another way. Supplies had to be apportioned for each Tibetan camp. During a typhoid immunization effort, for example, Rinpoche instructed the NAU and Tibetan nurses to immunize not only the monks and Tibetan community, but also arrivals to the clinic from the Indian community. The nurses also made a special trip to immunize a local Indian politician and his family who had been very supportive of the Tibetan community. Although the health care team believed that this was the right thing to do, they exhausted the supply of typhoid vaccinations earlier than anticipated.

Another challenge in defining community was trying to discern the representativeness of the community needs assessment. It was not clear whether the issues raised by Rinpoche were the same as those of the seven camp leaders. Community members may have agreed with what Rinpoche suggested out of respect. As outsiders, the NAU team could not identify all of the stakeholders and were not privy to any internal tensions or disputes among the camps. Because the camps were composed of Tibetans from different parts of Tibet, they differed not only in size and composition, but also in customs and traditions. Some spoke dialects that others did not understand. Some were strict vegetarians and others ate meat. Residents closest to the Tsori Monastery benefited from easier access to health care; from more distant areas, travel over poor roads by bus or motorbike was necessary. There also appeared to be competition between camps with regard to the settlement's organic farming project and other issues.

Although thought and preparation went into the needs assessment, it was performed in haste due to limited communication and a short time on site. There was not sufficient opportunity to capture data and observations outside the scope of the survey. The translators guided some of the interaction, so their perspectives likely influenced what the teams observed. The translators were exceptionally skilled, but they were not representative of the entire community. The academic teams needed more time to assess the community, develop deeper relationships to ensure clear documentation of shifting needs, and strengthen opportunities for program sustainability.

Timing and cultural competency. The university determined the timing of NAU's visits. The team was entrapped in an academic calendar and guided by administrative requirements to schedule travel over winter break, even though this was an imposition on the Tibetan refugees. The project team avoided India's rainy season (in summer months) and the complications that this would bring (a heightened risk of exposure to malaria-infected mosquitoes and an increased likelihood of not completing intended projects due to the problems of accessibility or the delivery of goods in adequate condition). This was not, however, the time that worked best for the camps or the monastery. The NAU team arrived during harvest time and set up clinics that either drew workers away from the fields or precluded their participation altogether. This timing particularly impacted the poorer Indian communities. Although Tibetans are involved in agricultural activities, they hire Indians to do much of the hard labor in the field. At one point, the project's clinics conflicted with a religious ceremony. Also during this time, young people were away from the settlement selling sweaters in the city. This defeated plans to provide instruction on family planning and HIV prevention-topics that Rinpoche had requested. Most of the residents, therefore, were elderly and had different needs from a number of those identified by Rinpoche in preliminary meetings with NAU.

The organization of clinics was challenging. Local translators worked with camp leaders to schedule services. There was no way to determine whether they, too, deferred to the project's needs rather than those of the community. For example, when setting up services in the different camps, project participants asked, "Is Wednesday or Thursday a better time?" Though well-intentioned, this could have been translated as, "They're coming on Wednesday. Okay?" Although the Tibetans could not have been more gracious, the team suspected that they made accommodations out of respect.

Complexities of implementation. The remoteness of the location contributed to the project team's sense of urgency and purpose of the work, but it created numerous challenges. For example, each academic unit developed a plan, but these were sometimes impossible to complete in one visit. In 2011, the engineering team proposed an energy system for the Tsori Monastery that relied on equipment that was ordered well before NAU's departure. The distributors were in-country, but the equipment did not arrive until 2 years later. In 2013, the engineering team was able to complete part of the energy system it had designed, but not without further complications. During the 2013 visit, a serious international cul-

tural affront took place in New York City, where a female Indian diplomat was arrested and strip-searched. Anti-American demonstrations erupted throughout India, even in remote areas of the country, and the engineering team had to postpone travel to a nearby town to collect supplies until emotions stabilized. There also existed a rarely mentioned but real risk of being caught up in local political violence. Mainpat is considered inside the "Red Corridor" of the recent Naxalite-Maoist insurgency.

The nursing team brought supplies to be used at the Tibetan clinic. One nursing faculty member wanted to sustain support after the team left and was in e-mail contact with a Tibetan clinic nurse, but the clinic did not yet have telemedicine capability. The Tibetan nurses decided that the NAU nurse would send one package with wound care supplies as a trial, but the package arrived at the clinic opened and with sterile equipment contaminated. The Tibetan nurse suspected the behavior of corrupt postal service employees and suggested that it was not safe to send anything else, as things frequently got stolen; the plan to develop a system of sending field material kits was discontinued. A better option might have been to identify a reliable source in-country, but as evidenced by the engineering example, this may be a complicated process.

Train-the-trainer efforts were also a challenge. Many potential in-country trainers were not available or had more pressing priorities. Since the community identified problems with waterborne diseases, public health students attempted to train potential trainers to improve the quality of water used for cooking. The team demonstrated use of cooking thermometers to test whether water was boiled to a temperature adequate to kill waterborne pathogens. The Tibetan nurse seemed very enthusiastic about the concept and trained others in the community to use them. In later years, the NAU team could not ascertain whether these instruments were used by the community, answers to questions about them were vague, and none were seen during subsequent visits.

Navigating the rabies prevention efforts was complex. According to Rinpoche, rabies was a serious problem in Mainpat. According to the World Health Organization, 36% of the world's rabies deaths occur in India; many people, especially in rural areas, do not know what the disease is or how to treat it (*Kole, Roy, & Kole,* 2014). The team's door-to-door interviews in the seven camps, however, gave no indication of a problem with dog bites. Nevertheless, the veterinary team performed vaccinations on dogs due to the virulence of rabies, dogs' frequent contact with wild animals, and the lack of access to medical treatment if humans were bitten. The team provided follow-up boosters a year later. One critical concern, however, was that veterinarians who had joined the group asked students to handle the dogs, despite the students' lack of training to do so. They also asked children to bring dogs to the clinic. This highlighted a lack of thought regarding unintended consequences for the community, with a potentially serious outcome.

The NAU team received conflicting information about rabies in 2013, when Rinpoche reported that there had been 35 rabid dogs in the Mainpat area and one human death from a dog bite. The information was anecdotal, but given the critical nature of the disease, the team obtained rabies vaccine for the dogs in the settlement. Rinpoche arranged for dog handlers from the local community to vaccinate the dogs the day after NAU's departure, but there was no apparent follow-through. In 2014, another veterinarian joined the NAU group to check on the rabies problem and other canine diseases. Unfortunately, there was a lack of communication; the veterinarian did not know that some dogs had been microchipped, and some of the dogs received unneeded rabies boosters.

Lessons Learned

The Mainpat Project participants tried to respond to needs identified by the community, apply theoretically sound strategies for intervention in a global context, and adapt the program by learning from mistakes made, both in-country and in preparing for the next year's visits. This approach, however, set the stage for misunderstandings and challenges for both the community and for the NAU team. Is it possible for a small-university-based servicelearning project to embrace cultural humility and put communities first or at least on an equal footing? The project staff helped some individuals resolve short-term problems but did little to mitigate the health and social inequities between their world and ours. How should service-learning projects respond to problems amid so many? Dr. Luis Fernandez, one of the 2011 participants, summarized the issue. The project team could address the more immediate problems by situating ourselves in the deeper, more embedded problems of the culture:

The world is messy. . . . You need to understand that you will not understand the location, regardless of prior experiences and world travel. You are going to make mistakes. Americans are problem-solvers. For Tibetans, it's about a process. The problems in India and Tibet have lasted for centuries. They will not be resolved in one visit or even a series of visits. (*L. Fernandez, personal communication, July 7, 2015*)

If, as outsiders, service-learning project participants cannot understand these remote, culturally complex communities, they are at risk of serving their own needs more than developing interdependent and meaningful partnerships. Efforts "sometimes result in the opposite of what participants hope to accomplish" (*Crabtree*, 2013, p. 49). However, the specific lessons to be gleaned from this experience can improve plans for future work in these "messy" global relationships.

Addressing messes requires a tolerance for ambiguity, uncertainty, and conflict and a willingness to test strategies whose results cannot be known with any degree of certainty in advance. (*McNall, Barnes-Najor, Brown, Doberneck, & Fitzgerald, 2015, p. 6*)

Two major areas for improvement emerged that have been discussed elsewhere in the literature (e.g., *Crabtree, 2013; McNall et al., 2015; Reiff & Keene, 2012*): (1) predeparture planning and (2) community participation.

Predeparture planning. Sustained university commitment, especially during predeparture and reentry, is essential at every level (Crabtree, 2013) and requires "systemic engagement" (McNall et al., 2015, p. 2). Although preparatory strategies had been implemented throughout the year, they were insufficient and, in some cases, uninformed. As the program proceeded, shifts in internal leadership and involvement of different entities at the university contributed to incomplete internal communication, less attention to careful participant selection, and inadequate cultural competency training. Even with rigorous vetting of students and faculty, it was impossible to anticipate personal problems and agendas that would emerge in the remote and demanding environment of rural India. In the future, the project team needs to create better contingency plans to respond to participants' experiences, not only when exposed to a completely new culture, but also when situated in a remote area from which it is very complicated or impossible to extricate themselves. How would the team send students or faculty back to the United States if they were being culturally insensitive or disrespectful? Cultural insensitivity can be a source of longlasting damage within a community. Actions in-country also have significant consequences for future global service programs, for the university's credibility, and for faculty members' research, service, or promotion if their projects are interrupted (*Crabtree*, 2013). University policy changes need to address this issue.

Sustained participation in a labor-intensive project, however, requires university engagement at multiple levels (*Chupp & Joseph, 2010*). An effective service-learning project must meet both the expectations of the community and the standards of the institution, and collaborations present "wicked" problems (*Ramaley, 2014*). Financial and temporal commitments of this magnitude, however, may not be feasible at a small public university.

Student concerns. Students in the Mainpat Project earned course credit in the semesters prior to, during, and after the project's end, but the time commitment in preparatory activities far exceeded the credit hours, and course credits were not an integral part of the disciplines' curricula. In the future, course credits should fulfill requirements of the discipline through an alternative track. Empathy training is invaluable (Everhart, 2016) and could mitigate on-site instances of discomfort or cultural insensitivity. Preparatory education, such as training in cultural competency and humility, should be required of all students and faculty. Official course credit and service requirements for these special educational trainings could ensure that "learners have reflective opportunities and resources to explore growth in their understandings of themselves as individuals capable of responsible and ethical behavior in global context" (Hartman et al., 2014, p. 113). More time for predeparture and on-site debriefing to examine cultural bias and culture shock, reflection, and self-evaluation of the project's impact (e.g., unintended ecological footprint, displacement of the monks) could improve community-participant outcomes and better inform future planning.

Faculty concerns. Service is an expectation for faculty, but research activity is emphasized for promotion and tenure. Faculty could benefit from release time for development of these projects, as well as financial remuneration, so that research obligations can be met. A new scholarly agenda that includes community engagement is needed (*Ramaley, 2014*). Faculty also need time to develop a collaborative network of supportive partnerships and prepare participants for engagement. The Global Health Institute (*n.d.*) at the University collaborative that involves local leaders and other community stakeholders in planning, research, and information dissemination. The program requires that all participants receive rigorous orientation in the United States and intensive cultural

training in-country. There must also be time to include the community at all levels of preparation, development, and evaluation, and a culture in which partners create something new together: "Student learning and community goals must reinforce and inform one another. Either is undermined by the absence of the other" *(Hartman et al., 2014, p. 112)*. Faculty working with future Mainpat Project endeavors should enhance the community's voice and participation through improved contact and involvement. To be successful, project design and development efforts must be community-driven. "Community engagement, learning, program design, and budgeting should all include significant community direction, feedback, and opportunities for iterative improvements" *(Hartman et al., 2014, p. 112)*.

University concerns. The university's diverse administrative offices also need to be fully engaged in global service-learning (*Ramaley, 2014*). Legal counsel should ensure that all policies protect the host communities and the students, faculty, administrators, and university. The university should coordinate a strong network of collaborations, reliable funding sources, and approved policies and clear communication of them before project development. In the Mainpat Project, changes in protocol complicated planning. For example, in an effort to be inclusive, one administrative office postponed the deadlines for students' completion of applications and visas. Departments and administrative offices also delayed funding commitments. Improving a university-wide organization and infrastructure for project support with buy-in from all participating departments will facilitate future work in Mainpat.

Community participation and impact. Host communities should be equal partners in the planning process and guide the project's goals (*Bertaux, Smythe, & Crable, 2012; Crabtree, 2013; Hartman & Kiely, 2014; Minkler & Wallerstein, 2002).* Community participation cannot be sustained if contact with key leaders is not possible for months at a time. This is not under the control of either the project participants or the community. D'Arlach, Sánchez, and Feuer (2009) explain that there will be awkward encounters in any project development process, and they suggest that these negative experiences can motivate communities to address problems themselves and even build empowerment. To address this challenge, universities should be flexible, as time is needed to develop community trust, build extended relationships within the community, and focus on community-asset-based solutions to ensure sustainable change in the community (*Fitzgerald, Allen, & Roberts, 2010*). Communities must be involved from the start to ensure social justice and equitable sharing of power and resources.

Communication is also critical to establish clear understandings of each partner's roles, abilities, limitations, and goals. Once a community identifies problems with which it needs assistance, the needs may not be what a project can or should address. For example, in Mainpat, problems with leaky roofs were the most widespread complaint. Poor housing is linked to poor health outcomes, but it is inefficient to bring students to Mainpat to fix leaky roofs. Does asking residents their priority needs then commit a project to respond to those needs? In situations where there are already substantial cultural and language differences, the process of a needs assessment itself could be misinterpreted as a commitment to fix the problems. There is a greater issue at stake here. Hartman and Kiely (2014) emphasize the need to "approach knowledge and action with deep humility" (p. 234) to acknowledge "common human dignity" (p. 237). To honor the community, expectations on both sides should be clear before a project starts.

Interventions should be relevant to the community. In Mainpat, however, the value of interventions differed substantially among stakeholders. Rinpoche encouraged both preventive measures and health care intervention. The community valued tooth extractions and pain relief highly, but some residents did not necessarily see dental cleaning as a high priority. Teeth cleaning is easily accomplished, but preventive medicine from an American perspective is not a way of life in this population. In some cultures, food and prayer are preventive medicine. Should a project goal include "train the trainer" exercises if the community has more pressing needs? The dental hygiene faculty decided to train Tibetan nurses and the head monk at the Tsori Monastery in fluoride application and appropriate tooth-brushing techniques. There has been no feedback from them after NAU's visits, and responses to inquiries continue to be vague. In 2014, however, the project team observed a number of Mainpat residents brushing their teeth with the toothbrushes that had been left from previous years' visits. Rinpoche supported this effort, the experience was a good learning opportunity for students, and dental hygiene supports good health in general. The team provided dental cleanings, therefore, even though it was not identified in the needs assessment.

Despite having a list of problems identified through the needs assessment, the NAU team remains unsure what the community really wanted and whether the team's interventions were useful. It is possible that some community members accepted our interventions out of courtesy rather than need. It is also possible that our providing services to some of the community (those who were in Mainpat in December) and not to others contributed to internal tensions and jealousies between residents (Crabtree, 2013). The Mainpat Project participants were perhaps ultimately considered more of a stressor on community function. Rinpoche was already burdened by management of settlements in Mainpat and Nepal, vet he graciously took on management of logistics. Rinpoche acted as our liaison with the local government and camp leaders. He arranged bus transportation from the airport to Mainpat (12 to 14 hours), the jeeps and drivers to the seven refugee camps, and the translators. He assigned several monks to care for the team's needs. Rinpoche bought bottled water and food and hired a cook to prepare meals. At his behest, the team displaced the monks by setting up tents and sleeping bags in their classrooms and using their bathrooms. The NAU team used too much of the scarce electricity and too much water, and produced garbage that the monks had to burn. Rinpoche purchased toilet paper, and despite predeparture education on latrine etiquette, some NAU participants put the paper in the toilets. This blocked the latrines that several team members then unclogged. The monastery and community were disrupted by NAU's visit. The team paid for the services and supplies, yet in the end, even Rinpoche admitted that the trip had likely benefited NAU more than the community.

It is important to help a host community discover value for its own assets and resources (*D'Arlach et al., 2009; Lieberman, 2014*), and the NAU team hoped to support the Mainpat settlement's empowerment. However, "empowerment cannot be bestowed upon an individual or group; it is something that must grow from within" (*Darling, Kerr, Thorp, & Chung, 2014, p. 34*). How does one support empowerment in a community that has a religious leader? Do such communities want empowerment as an American envisions it? Sometimes a community wants immediate care before prevention. Sometimes train-the-trainer efforts are not the community's priority. They have no time for this when faced with more pressing challenges of food insecurity, unemployment, and political and social unrest—larger problems over which a small public university service-learning project has little, if any, impact.

Most of the Tibetan refugees, however, humbled the NAU team with their gratitude. Old men and women bowed in thanks. Several residents, including one camp leader, thanked the team for keeping them in our thoughts and remembering their historic struggle against Chinese occupation. These elders are the last survivors of the desperate emigration from occupied Tibet; they crossed the Himalayas on foot, taking months to arrive in this remote area of India. Perhaps a foundation for trust was initiated in the short time allowed by the project participants' visits, and support for these Tibetan refugees in India was achieved through other means:

the power of witnessing, the catharsis of sharing stories, the ability of our presence to draw attention to forgotten places and situations, the way one project can be a local catalyst beyond our visit and unrelated to our intentions, and the deep significance of accompaniment through living and working side by side. (*Crabtree, 2013, p. 61*)

Those who wish to continue the Mainpat Project need more time to embed themselves in the community, to live and work side by side, in order to understand next steps.

What's Next?

There are multiple opportunities for application of lessons learned in Mainpat if the community wants the NAU team to return. The lessons learned can serve as motivation to encourage further work with appropriate preparation and dedication to equitable engagement with the community. It is undoubtedly true that in the short term, NAU students and faculty benefited more than the Tibetan community. The question now is, what changes can take place in the next 5 to 10 years, both in the relationship with the Mainpat community and within NAU?

A first step is to approach the community with a new sense of humility to reestablish the Mainpat–NAU partnership in a more meaningful way. This involves a community-assets approach to build capacity and develop an equitable power-sharing infrastructure. Northern Arizona University should examine sustainable models. The social ecological model has proved successful in rural communities (e.g., *Coleman & Alonso, 2016*) and would be appropriate for Mainpat. In authentic partnerships, such as the California Breast Cancer Research Program and the Community Research Grants program, there is time for partners to develop trust and understanding before submitting a project proposal. They acknowledge the need to build infrastructure, clarify principles of participation, and work toward a collective agenda to avoid unequal distribution of power and resources *(Community Partner Summit Group, 2010)*. Communities need the capacity and motivation to mobilize, and universities need to view themselves as part of the community and to work with the community to effect meaningful change (Fitzgerald et al., 2010). Perhaps the next trip back to Mainpat should include only time for listening, developing relationships, and embedding students and faculty within the community to develop knowledge through patience with the environment and openness to personal experiences. The same group could return the subsequent year. In this way, a service-learning project may evolve to a community engagement model to address project longevity and sustainability of community change. Green (2014) suggests involving the global partners as coeducators in framing student learning objectives, a goal that acknowledges their insights and experience. Along with in-depth needs assessments and continuous reevaluation, work needs to focus on the assets and capacities of the Tibetan and surrounding community to work with existing infrastructure and facilitate a framework for building resilience. At this point, the project's impact on the community is uncertain. Next trips to Mainpat must include a community-directed assessment of community benefit of NAU's involvement.

Concurrently, the university should examine its commitment to costly and complex multidisciplinary global projects. For a small university, the infrastructure needs for a project like Mainpat can be daunting. Given the problem of fewer government dollars for higher education, Maurrasse (2010) suggests turning to private philanthropy and forming collaborations across institutions. Interinstitutional collaboration would require leadership buy-in and cooperation among institutional entities. Though this type of collaboration is rare, it is possible. Time to build trusting and mutually beneficial relationships applies here. A small university with unique relationships with communities like Mainpat can be an asset to a larger university with existing global resources and infrastructure.

Within NAU, faculty and students can benefit from guidance in the value of listening to the community and to each other, to develop relationships and build a sustainable project together. Empathy training exercises and deep reflection before, during, and after project participation are essential. Green (2014) emphasized that reflection assignments are as important as learning activities. In lieu of different disciplines creating interventions independent of each other, students and faculty who practice listening—first to the community, then to each other—are more likely to build a predeparture plan that is community-driven and collaboratively constructed.

Conclusion

This reflective essay has presented community–university interactions, challenges, intended and unintended outcomes, and lessons learned from the Mainpat Project. Future work in Mainpat can build upon lessons learned in situ and apply best practices from existing models of global service-learning, including listening to the community with humility and affirming its strengths.

Rinpoche's talks laid out three elements of generosity: One is sharing what you possess—food, clothing and shelter. The second is extending protection and security. The third and most important form of generosity is giving knowledge, being a teacher. After my visits to Mainpat, I concluded there exists a fourth kind of generosity, one that Rinpoche never mentioned directly, but which resonates in his teachings: supplying affirmation. We went to a place very few foreigners visit. We corroborated the people's plight and confirmed their struggle. We recognized them, shared their rice and *balep* bread, saluted their accomplishments, attended their needs, acknowledged their stories, and affirmed their dignity. Our health impact may be small. The affirmation effect, on the other hand, feels enormous. (E. Curtis, personal communication, July 31, 2016)

Due to funding limitations and other complications within a small university infrastructure, the Mainpat Project has ended. Nevertheless, some former project participants continue communications with the monks through Facebook and video conversations. Multidisciplinary relationships have also continued among students and faculty at NAU. A collaborative team from public health, nursing, dental hygiene, and photojournalism presented posters about Mainpat at the Undergraduate Symposium Honors' Day. The dental hygiene students who participated in the Mainpat project also successfully reached out to the larger dental community with well-received table clinics presented each year at the annual sessions of the Arizona Dental Association. Students presented their experiences at the Southwest Institute for Learning with Technology, and data from the health assessments were shared with Rinpoche. The contributions of the photojournalism team promoted awareness of the Mainpat community, preserved Tibetan culture, and possibly garnered new support for future generations of Tibetan refugees. Whereas the Tibetans in Mainpat do not have

the power to vote or affect local politics, Americans do. The effort that is required for a project of this magnitude and level of complexity may plant the seed that leads to an enhanced quality of life for others.

If we put out a seed, rejoice. Participate in the act to benefit all generations—place the seed where many will get enlightenment. (*Tulku Tsori Rinpoche, personal communication, December 22, 2012*)

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Retrofitting the Ivory Tower: Engaging Global Sustainability Challenges Through Interdisciplinary Problem-Oriented Education, Research, and Partnerships in U.S. Higher Education

Amy Patrick Mossman

Abstract

Various experts and institutions, including the United Nations, have stressed the complexity of the 21st century's global sustainability challenges. Higher education institutions should be at the center of research and education to meet these challenges. However, these institutions also find themselves in crisis, in part due to the economic recession, but also due to traditional disciplinary barriers that do not always incentivize interdisciplinary collaborations and public outreach. Challenges to interdisciplinarity are discussed, and examples of successful approaches are presented to demonstrate possibilities for prioritizing problemoriented research and education tied to community and industry partnerships across higher education.

Keywords: general education, interdisciplinarity, sustainability, partnerships

Global Sustainability Challenges and What It Will Take to Address Them

In the last 20 years various experts and institutions have repeatedly identified the following global sustainability challenges for the 21st century: climate change, nutrition and health, biodiversity loss, poverty, pollution, resource depletion, food security and safety, access to clean water, sustainable energy development, overfishing, and ocean acidification. In *Transforming Our World: The* 2030 Agenda for Sustainable Development, the United Nations (2015) identified numerous key global challenges to address over the next 15 years and then adopted an intergovernmental resolution (A/ RES/70/1, September 2015) with 17 aspirational goals (see Figure 1).

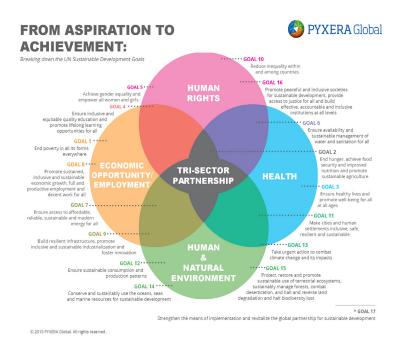


Figure 1. Seventeen UN Sustainable Development Goals (Pyxera Global, 2015).

Not surprisingly, U.S. institutions of higher education have frequently been the focus of calls for more research, education, and engagement in these areas. Disciplinary knowledge and professional training are certainly essential to meet these challenges; however, they are not sufficient. These complex problems, not coincidentally, also require the same kinds of skills and abilities that employers most often cite as highly valuable in employees: ability to think critically and reason analytically; analyze and solve complex problems; effectively communicate orally and in writing; apply knowledge and skills to real-world settings; locate, organize, and evaluate information from multiple sources; innovate and be creative; work in teams and collaborate in diverse group settings; and connect choices and actions to ethical decisions (*Hart Research Associates, 2013, p. 8*).

U.S. universities and colleges are poised to more strategically offer better preparation in these skills and abilities while also addressing global sustainability challenges and the needs of our local communities and workforce. As Mulkey (2012) argues, "We can save both this planet and higher education by developing liberal arts curricula that have sustainability education as a foundation" (*p.* 356). For the purposes of this article, *sustainability education* includes any aspect of education that delivers content and skill sets that are relevant to addressing the global and local sustainability challenges outlined here. In order to develop the understanding and innovations that complex global sustainability issues require, it is essential to support and develop problem-oriented research and education through interdisciplinary collaborations, community and industry partnerships, and general education curricula that provide students literacy about major global challenges and the skill sets and experiences critical to complex problem-solving, communication, and teamwork.

In this article, I review both the development of sustainability as a popular concept in the context of global challenges, and some of the challenges and thinking at the root of the crisis facing U.S. institutions of higher education, in order to explore ways in which the challenges of both present mutually beneficial opportunities for innovation. These opportunities themselves are not without implementation challenges, but several models exist from which institutions of higher education can draw, not only to adapt to the 21st century, but to do so in ways that prepare their communities to better address this century's greatest challenges.

Sustainability: A Brief Overview

For clarity and context, it helps to review the larger discourse surrounding sustainability in higher education and its connections to interdisciplinarity. Current discourse on sustainability has its origins in 1972, when several nations from around the globe met in Stockholm, Sweden for the United Nations Conference on the Human Environment to "delineate the 'rights' of the human family to a healthy and productive environment" (United Nations General Assembly, 2010). This conference led to a series of subsequent meetings and the establishment of institutions and working groups within the United Nations. In 1983, the World Commission on Environment and Development (WCED) was created. Sustainability as a term gained popularity in 1987, when the WCED produced the report Our Common Future (1987), often referred to as the Brundtland Report for Gro Harlem Brundtland, chair of the WCED. The document emphasizes the equally important, linked concerns of social equity, ecological integrity, cultural diversity, and economic stability. Agenda 21: The UN Programme of Action from Rio (1993), which contains the Rio Declaration, came out of the UN's first Conference on Environment and Development (UNCED) in June 1992. Agenda 21 also emphasized that sustainable development is dependent on our ability to balance economic, social, and environmental concerns. According to the UN General Assembly report of the Secretary-General (*A*/65/314), *Sustainable Development: Harmony with Nature* (2010),

Since UNCED, sustainable development has become part of the international lexicon. The concept has been incorporated in many UN declarations and its implementation, while complex, has been at the forefront of the world's institutions and organizations working in the economic, social, and environmental sectors.

The usefulness and accuracy of the term *sustainability* has been debated in publications across disciplines, from rhetoric to conservation biology and economics. For the purposes of this discussion, I use *sustainability* for its contextual grounding in the above-referenced UN documents; regardless of whether true sustainability is practically achievable, as a conceptual compass it can help us define and prioritize global and local challenges and guide human action, decision making, policies, and innovations toward inclusive social and economic development, peace and security for communities and nations, ecological integrity, and what Richards (2013) refers to as eudaimonia or "the good life." It may be co-opted, as critics rightly point out, by various interests to serve whatever ends it can be bent to serve, but the general concept provides an undeniably crucial function in global affairs and has the potential to shape U.S. higher education in the 21st century.

As "an effort to integrate disciplinary approaches in order to tackle complex problems," interdisciplinarity goes hand-in-hand with sustainability (Bursztyn & Drummond, 2014, p. 314). Additionally, Bursztyn and Drummond (2014) assert, "Interdisciplinarity plays a major role in the debate about the sustainability of human societies, in general, and about the crisis and the future of the University" (p. 313). For example, Roger Beachy (2011) of the National Institute of Food and Agriculture (NIFA) urges that scientists need to think like social scientists and humanists, even incorporating them in their teams, in order to innovate feasible, usable solutions, and impact society positively on local and global scales in both the short and long term. Furthermore, he recommends that colleges and universities facilitate interdisciplinary research, collaboration, and networking between disciplines and with community and industry partners, noting this is key to meeting today's global, regional, and local challenges. Bursztyn and Drummond (2014) explain, "The

more we advance, the more we need to find solutions for the problems linked to our advancement," and those solutions increasingly require creativity and a mosaic of expertise (*p. 313*).

The Public Higher Education Crisis and Sustainability

It is not surprising that calls for sustainability education and continued growth in the "green" jobs sector echo both nationally and globally. Yet the sustainability movement's integration into U.S. higher education has been largely through campus operations. Some institutions, like Unity College in Maine (*n.d.b*), have successfully incorporated sustainability across all aspects of the college and curricula, but few institutions have seen sustainability education and goals rigorously and concretely incorporated into their mission statements, advancement and planning strategies, departmental curricula, and general education learning outcomes, and few have explicitly tied sustainability education to highly valued skill sets or to the social and cultural dimensions of sustainability.

Despite the global sustainability challenges we face, in the past quarter century, how much transformation have we actually seen in terms of higher education's response? Has sustainability literacy risen among college-educated citizens? Most importantly, has higher education adapted to match learning outcomes with the global challenges we face and the skills employers seek today? Are we preparing future generations to address challenges, solve problems, and prevent further deterioration in quality of life for all? Are we encouraging and supporting faculty research that does so? Having provided an overview of sustainability, I now turn to a brief discussion of the crisis in U.S. higher education not only to show how the two are connected, but also set the context for simultaneously addressing some of the challenges in both arenas.

Addressing the challenges of the 21st century and preparing our students to live and work successfully in this century require fundamental changes in how universities and disciplines have traditionally functioned. This is an opportune time for faculty and academic leaders to address both global sustainability challenges and the crisis of the university by calling for a paradigm shift in how we think about general education, disciplines, teaching, and research, and how we prepare our students for addressing the challenges of the day while, as scholars, attempting to do the same. The answers do not lie in closing doors and narrowing focus, but in using the cornerstones of higher education to create new models. As budget cuts dominate concerns on college campuses, sustainability initiatives and their associated resources are being cut, perceived as "a fad of the new millennium" (*Carlson, 2015, p. 23*) with limited relevance to the mission of higher education or the solutions needed to lead U.S. higher education out of crisis. The impact of the economic situation facing many institutions of higher education is widespread and far-reaching, resulting in significant cuts to campus areas and programs perceived as having a low, direct, and short-term benefit-cost ratio.

This reduction to cost savings and benefits is evidence of economism, an underlying problem at the root of both the university and sustainability crises. Leiserowitz and Fernandez (2008) describe economism as the "privileged place economic analysis holds in policymaking and the acquiescence of other disciplines to the rules of economic discourse"; thus, "many individual decisions, some with deep moral implications, are now determined primarily by income and prices" (p. 63). The overapplication of an economic lens at the expense of other perspectives narrows everything from our priorities and values to our opportunities and ability to innovate, and we see the impacts globally as well as within U.S. higher education. This push to value economic benefit above all else risks leading us into an increasingly narrow future, jeopardizing our ability as a nation to innovate solutions to complex problems or avoid inventing new problems, as well as our ability to make healthy sense of our lives and contribute to our communities as ethical, civically engaged individuals.

Faust (2009), citing Fallis, notes that universities are nevertheless caving to pressure from taxpayers, government, and their corporate and other financial supporters to align their missions, strategic plans, and assessment with a market model (*p. BR19*). As well, most institutional and state boards overseeing educational reform are dominated by business professionals, not educators or academic experts. Sahlins (2009) argues,

The university is in need of reform, if not revolution. It will not come from boards of trustees and captains of erudition whose main qualifications and functions consist of raising money, for which purpose they are prepared to treat the intellectual organization of the university as the pecuniary means of a business enterprise. (*p. 1017*)

LeMenager and Foote (2012) also critique the impact of economism on students, "whom the system of higher education has turned into a class of people valued as customers and virtually ignored as intellectuals in all but a handful of schools" (p. 576). Indeed, I have heard colleagues outside the humanities, for example, argue that the humanities may serve a purpose at a large research institution, but at a regional comprehensive master's institution, students just need job skills and professional training. Yet clearly, employers want more than that, as the 2013 survey conducted by Hart Research Associates demonstrates. If the broad intellectual perspective that general education provides is severely reduced or removed from public institutions, becoming the purview of private liberal arts colleges, then only the elite will have access to such an education. However, if institutions adapt their general education programs to the needs of today, with a focus on the kind of interdisciplinary, problem-oriented education critical to sustainability and today's workforce, those institutions will produce a citizenry better prepared for addressing today's global and local challenges, which require more than specialized knowledge and job training. Faust (2009) concludes that higher education "has the responsibility to serve not just as a source of economic growth, but as society's critic and conscience" (p. BR19). Bursztyn and Drummond (2014) envision, "The solution is not the scuttling of the University, but rather reinventing it" (p. 323). But how? Where do we go from here?

How can institutions work to address systems and structures that hinder and even undermine much-needed sustainability education and research, and develop models that foster interdisciplinarity, interinstitutional collaboration, and community and industry partnerships that have the potential to revitalize higher education's position in American society while addressing complex local, national, and global problems? Sustainability education is most effectively delivered in an interdisciplinary environment that helps students grow intellectually while navigating complex problems and developing constructive thinking, teamwork, systems thinking, and other skills that have tangible applications. How can we strengthen our foundational general education curricula so that, combined with training in their majors, students leave college with sustainability literacy as well as the skills, disciplinary expertise, and multifaceted perspectives that employers seek and that solutions to global challenges require? In short, how do we retrofit the ivory tower to the 21st century?

From Crisis to Opportunity: A Retrofit of Educational Approaches in Higher Education

Higher education finds itself challenged by an increasing gap between the world of academia (the ivory tower) and the social, economic, and environmental realities of our age (Bursztyn & Drummond, 2014, p. 319). Hales (2008) argues that we are inadequately prepared to address the major global challenges the world faces because our institutions-higher education and other systems-"are demonstrably incapable of long-range planning, dominated by peculiar and special interests, fragmented in authority and responsibility, and designed to allocate abundance, not scarcity" (p. 23). Interdisciplinary research, training, and collaboration are increasingly important to addressing the complex problems we face today. Reflecting this, major funding agencies like the National Science Foundation have initiated problem-oriented grant programs emphasizing such collaboration. But as Bursztyn and Drummond (2014) warn, "Unless changes are made, the gap between societies' demands for solutions and the capacity of the University to provide them will continue to increase" (p. 314). Thus collaborations must also build networks with community and industry partners as well as other institutions.

As Beachy (2011) explains, we need to think of ourselves and our students not as pupils of particular disciplines but as pupils of problems-problems of societal relevance that, embodying the complexity of the real world, cut across disciplinary borders and thus can only be solved in disciplinary convergence zones. Such a shift requires institutions of higher education to embrace a commitment to problem-solving in curriculum and research that draws on disciplinary knowledge and methods but supports the integration of multiple perspectives for interdisciplinary collaboration and education. This shift also requires fostering productive relationships with local and regional communities so that institutions are not islands or towers, but centers of regional engagement and enhancement. We need to focus higher education on "collaborative work, integrative learning, the combination of the intellectual and the experiential, active approaches to learning, problem solving, and, especially, engagement with contested ethical issues and 'big questions" (Weissman, 2012, p. 10). These things are not only at the core of sustainability literacy, but also at the core of the essential learning outcomes that the Association of American Colleges and Universities (AAC&U) has identified for general education (Weissman, 2012, p. 10). Thus, a retrofit requires the integration of sustainability literacy and problem-solving skills into not only majors, but also general education.

General education that emphasizes these learning objectives through an interdisciplinary, problem-oriented curriculum, combined with disciplinary training that incorporates interdisciplinary and community engagement into applied learning experiences, such as internships, co-op programs, and service-learning, is not only important for citizens' personal and intellectual development; it is also crucial for solving global challenges that require "adaptive innovation within a changing world" (*Tarrant & Thiele, 2016, p. 55*). Further, it has the potential to strengthen connections between institutions and their regional communities, preparing students for careers locally and abroad while giving back to their communities in productive, tangible ways.

As campus physical plants adopt Leadership in Energy and Environmental Design (LEED) standards by implementing LEEDcertified new construction and LEED retrofits of older buildings, so too should campus leaders be thinking of ways to retrofit their academic infrastructures, curricula, policies, and practices—built on traditional disciplinary models—to be adaptive to the global and local challenges of the 21st century and to produce not only the workers, but also the thinkers, doers, leaders, and problem solvers the 21st century needs. Thus, a retrofit that begins with a transformation of general education to integrate sustainability literacy and top-valued skills, and that fosters and supports interdisciplinary research and educational opportunities for faculty and students, with an emphasis on problem solving that is linked directly to community and industry needs through partnerships, is socially, ecologically, and economically critical.

Hoffman (2015) asserts, "Academic scholars have a duty to both recognize the impact of their work on society and communicate that impact to those who must live with the consequences," noting that academics must consider how they can best "make an impact beyond campus walls" (*p. A48*). Vibrant intellectual inquiry and exploration in all disciplines is vital to cultural understanding and evolution, and thus all disciplines play a role in shaping the way we think about and respond to problems not only in terms of solutions but also through our values, policies, and actions. As centers of inquiry, knowledge production, and innovation, colleges and universities have an obligation to connect with their surrounding communities and contribute to addressing local, regional, and global challenges. Hoffman (2015) points out, "If society is to make wise choices, those who create knowledge must move it beyond the ivory tower" (*p. A48*). Emphasizing problem-oriented research, education, and collaborations in higher education mission statements and strategic plans opens opportunities for students and scholars of problems to find innovative ways to contribute to their local, national, and global communities.

Why Sustainability, Interdisciplinarity, and Problem-Oriented Education and Research?

To address global challenges, higher education in the United States must adapt to its sociohistorical and political context, and it is in the best interest of individual campus communities to be actively engaged in shaping those adaptations, whether land-grant universities, regional comprehensives, private liberal arts colleges, or any other higher education institutions. It is no coincidence that Mulkey (2015), Rhodes (2006), Weissman (2012), and others have noted connections between the crisis of the university and the global challenges we face in the 21st century. As we prepare this century's leaders, professionals, and citizens, we must take seriously the opportunity and responsibility we have to "evoke societal change and contribute to the creation of new knowledge and paradigms" (*Christie, Miller, Cooke, & White, 2015, p. 655)*. Disciplinary expertise and technical training are only part of the equation. McArthur and Sachs (2009) explain,

The problems are complex and interconnected, spilling across academic disciplines and often across national borders. Solutions will require theoretical knowledge and practical problem-solving skills, including the capacity to build and lead teams drawn from a variety of disciplines. They will require leaders who can cross boundaries of science, policy, geography, theory, and practice. (*p. 26*)

When making decisions about everything from budget cuts to curriculum changes, institutions should position themselves to address sustainability challenges through interdisciplinary, problem-oriented education and research.

College graduates need more than disciplinary training; they need an understanding of "historical experience, social perspectives, moral considerations, and humane reflections of our fellow human beings through the ages" in order to be leaders, innovators, policymakers, and problem solvers (*Rhodes, 2006, p. 71*). Science and technology are crucial, but their development and application are

guided by systems of values and ethics. Slovic (2012) notes that a major challenge to addressing today's problems has to do with our systems of ethics (*pp. 180–181*). Mulkey (2015) calls sustainability education an "ethical imperative," and Christie et al. (2015) underscore the "moral imperative" of universities and colleges to prepare graduates with the "knowledge, values, and skills to contribute to an environmentally sustainable society through their personal and professional actions" (*p. 655*). Leiserowitz and Fernandez (2008) also point out that expertise and understanding are useful only if they can be conveyed and delivered into the public sphere (*p. 62*). This is where interdisciplinary, problem-oriented general education can play an equally crucial role, by not only preparing students with knowledge, values, and skills, but also providing opportunities to engage and collaborate with the public and greater community.

Is this placing too much responsibility on institutions of higher education? Is it asking too much of our faculty, staff, and students? Hales (2008) asserts, "No other societal institution can play this role. Education is the force that will enlighten, enable, and empower our choices" (*p. 23*). With power comes great responsibility, and opportunity is a kind of power that higher education both offers and creates. Faust (2009) reminds us that institutions of higher education in the United States have always had to negotiate tensions between sometimes conflicting goals that span a wide spectrum: "to be practical as well as transcendent; to assist immediate national needs and to pursue knowledge for its own sake; both to add value and question values" (*p. BR19*). These can be productive tensions that benefit society overall, but they require a commitment to adaptation and to navigating and crossing the boundaries between disciplines.

Like Mulkey (2012, 2015), Rhodes (2006) suggests integrating sustainability literacy and associated skills into the core of general education. He explains what such a foundation would look like, citing scientific knowledge, specifically systems-based sciences like ecology; social science training for an understanding of fundamental social interactions; "familiarity with the great issues and themes of human inquiry, self-reflection, and moral consideration that have guided human conduct and reflected human creativity"; and finally, "some review of the practical arts of technical discovery and invention" (*p. 71*).

Expertise is undeniably essential to addressing challenges across the globe and in our local communities. Because of the complexity of the problems we face, we need interdisciplinary training and collaboration, combined with problem-oriented general education, delivered by institutions that are engaged in research that not only addresses global challenges but also serves the needs of local communities through productive partnerships. Yet as McArthur and Sachs (2009) observe, "at a time when so many of the world's most-challenging issues require solutions drawing from across academic and professional disciplines, colleges remain overwhelmingly focused on single-discipline studies" (*p. 26*). Thus the question posed by Bursztyn and Drummond (2014): "How can we advance in particularity and in generality at the same time?" (*p. 320*). This is where the major retrofit needs to happen, and such a paradigm shift, however essential, is fraught with tensions and challenges.

Disciplinary and Institutional Challenges to Implementing the Retrofit

Interdisciplinary, problem-oriented education and research are integral to moving institutions of higher education beyond crisis, preparing our students for the challenges of this century, and producing innovative solutions to complex problems; thus, a comprehensive university retrofit requires cooperation across disciplines, as well as interinstitutional and other types of partnerships. But facilitating interdisciplinary education and conducting interdisciplinary research within most U.S. colleges and universities today is not simple. Bursztyn and Drummond (2014) explain,

As a complex institution that gathers intelligence and rewards it in accordance with strict rules and metrics, [the university] tends to have more room for developing knowledge within given paradigms than for breaking those paradigms. This opens a gap between the need to produce innovations and the ability to innovate and renew itself. (*p. 320*)

The challenges of infusing both general education and disciplinary curricula with sustainability content and skills bring us to the challenges of encouraging interdisciplinary research and teaching. Why? Because economism, combined with what Jones, Selby, and Sterling (2010) describe as the reductionist pursuit of knowledge ingrained in higher education policies and practices and embraced by disciplines, inhibits the collaboration and innovations that sustainable solutions require (*p. 18*).

Indeed, Chandler (2009) acknowledges, "The American university's accommodation of shifting patterns in and between the disciplines has been managed unevenly across its several domains from the natural sciences to the humanities" (*p. 730*). Why is this

kind of change and accommodation so difficult and slow for institutions of higher education? Kurland et al. (2010) refer to Weick's 1991 study that argued "universities are loosely coupled systems" (*p.* 458). Loosely coupled systems "have structural holes" and few interdependencies, which puts them at risk for uncoupling and poses a challenge to any kind of unified change in the system (*p.* 458). Nonetheless, institutions need to confront this issue openly and directly in order to adapt to 21st-century conditions, identifying structural holes and creating opportunities for productive interdependencies and flexible systems of collaboration.

Several scholars have discussed barriers to adapting higher education to integrate sustainability and interdisciplinarity in teaching and research. These barriers include disciplinary silos; institutional procedures and categories for course approval, curriculum design, and programmatic changes; requirements for retention, promotion, tenure, and merit raises; and faculty workload (Breen, 2010, p. 688; Weissman, 2012, p. 10). In addition, Jones et al. (2010) identify reasons for faculty resistance to sustainability education, which apply more broadly to interdisciplinary initiatives as well: faculty's resistance to incorporating new content, stemming from their perception of it as extraneous to their discipline or too value laden; their uncertainty about how to engage interdisciplinary content effectively; and the lack of career incentive for incorporating such content, as well as for collaborating with other colleagues (pp. 9–10). These barriers are all elements of the four key challenges to interdisciplinarity identified by Bursztyn and Drummond (2014): the stigma of generality, the syndrome of refusing otherness, the syndrome of nonpeer evaluation, and the syndrome of external metrics (pp. 321-323). All of these things present challenges not only to sustainability and interdisciplinary teaching and research, but also to building community and industry partnerships and creating and integrating service, experiential, and applied learning into general education and disciplinary curricula for students' professional development.

Stigma of Generality

Interdisciplinary collaboration and the broad generalizing sometimes needed to bridge academic knowledge to the public sphere are difficult to facilitate in a siloed system. The stigma of generality results from a privileging of exclusivity, where literacy in a particular discourse becomes more than a sign of expertise. Amey and Brown (2005) acknowledge that the privileging of exclusivity begins with graduate student training: They are trained to be experts on the cutting edge of increasingly specialized areas within their chosen discipline, especially if they are interested in research faculty careers. University and disciplinary reward systems, often based on a particularly narrow set of sanctioned behaviors, reinforce these graduate school socializations, keeping many faculty members organizing their work within narrow bands of perceived acceptability. (*p. 30*)

Although deep expertise absolutely contributes to interdisciplinary endeavors, hyperspecialization resulting from a reductionist approach to disciplines can widen the gap between disciplines and between the academy and the public sphere. Likewise, as journals become increasingly specialized, respected venues for publishing interdisciplinary work can be hard to find. Even where a reductionist approach is being replaced by a systemsbased approach, reaching the public presents another challenge, as there is a tendency among the general population toward binary and dichotomous thinking that is supported by both traditional and social media. Thus community partnerships become key to building understanding through clear communication and educational outreach.

Disciplinary silos. Leiserowitz and Fernandez (2008) point out the limitations of disciplinary silos, noting, "disciplines within academia (natural and social sciences and the humanities) are often isolated from one another. More broadly, too many academics talk only to each other, using language and jargon incomprehensible to even the educated layperson" (p. 64). Citing Bernard K. Forscher's similar 1963 critique in Science, Hoffman (2015) critiques the increasing push toward disciplinization and "brick making," saying, "Academics find themselves talking to ever smaller and narrower academic audiences, using a language that educated readers do not understand, publishing in journals they don't read, and asking questions they don't care about" (p. A48). And why? Because success and job security (tenure) lie in specialization. Hoffman (2015) continues, "Academic success lies in publishing academic journal articles that make incremental contributions to theory, not in summarizing the broader contributions of the community of scholars" (p. A48). Again, the incremental contributions are important, but privileging them over broader contributions risks widening the gap between academia and society.

Because interdisciplinarity requires individuals to collaborate on problems and projects across disciplines, a common language is foundational to progress, especially when working with nonacademic partners. However, by building clear communication using discourse accessible to all, interdisciplinary scholars can be perceived as too general, nonspecialized, or superficial (*Bursztyn* & Drummond, 2014, p. 321). A binary is often set up between specialization (perceived as deep) and interdisciplinarity (perceived as shallow) (*Bursztyn* & Drummond, 2014, p. 315).

Syndrome of Refusing Otherness

In general, universities are set up to offer courses housed under particular disciplines and taught by solo instructors. Not only is there little incentive to diverge from this model, but there are often disadvantages and barriers to doing so. Crane and Chiles (2011) note that requirements for teaching, research, and service and associated rewards systems often privilege specialization, and individual disciplines reinforce insular behavior and relationships by supporting only expertise that can result in specialized discourse and structures. Similar barriers still exist for developing or incorporating effective internship or service-learning experiences.

The syndrome of refusing otherness is tied to competition for resources, especially in times of economic instability and financial constraints. Crane and Chiles (2011) point out that perceived competition for financial and other resources can lead to unwillingness to collaborate. Additionally, for teaching and research, time is a consideration for both faculty workload and the tenure clock; interdisciplinary course development, outreach experiences, and research collaboration take time to succeed, requiring individuals to engage in dialogue toward common terminology, understanding, and a clear definition of the problem and goals (*Amey & Brown, 2005, p. 31*). At the higher administrative levels, innovative or interdisciplinary academic units are often rejected or even dismantled under economic constraints because it is believed the work of that unit could be covered by a more traditional disciplinary department.

Developing relevant, interdisciplinary problem-oriented curricula is also challenging. Kilcup (2009) observes, "Synthesizing subject-area content, interdisciplinary knowledge, theoretical approaches, and practical experience and making coursework relevant pose intellectual, ethical, pragmatic, and institutional challenges"—especially for faculty and institutions entrenched in a system that does not support, facilitate, or reward interdisciplinarity (p. 848). As Kurland et al. (2010) found in trying to create and offer an interdisciplinary course, for example, administrative structures and institutional mechanisms (or lack thereof) made it difficult to create and offer a course that transcended disciplinary ownership and for which faculty coteaching the course could be properly credited and compensated (p. 463). Territorial tensions often flare over interdisciplinary courses, and debates over content versus skills with respect to course goals and learning outcomes are not uncommon. Service on a university committee that approves new courses will open one's eyes to disciplinary ownership debates: Who owns sustainability, environmental justice, communication, ethics, environment, society, or pedagogy, and who can use the terms in course titles and include the concepts in course content? The answers are often contentious and hotly debated, and serve to reinforce unproductive barriers to collaboration and innovation within the institution and with the greater community.

Syndromes of Nonpeer Evaluation and External Metrics

The syndromes of nonpeer evaluation and external metrics are connected, both stemming from the fact that evaluators tend to have not only discipline-specific commitments but also disciplinespecific perspectives and experiences that they overlay on interdisciplinary units and individuals in the absence of clear interdisciplinary criteria. Resulting evaluations can either reflect, on one extreme, a hands-off approach and lack of care, or at the other extreme, inappropriate scrutiny based in a disciplinary culture that does not apply. Effective peer evaluation and the criteria used for assessment and evaluation are based in shared epistemic communities. Interdisciplinary epistemic communities are growing at the institutional level, but these communities are often nascent at best. For example, "evaluators tend to consider the best aspects of a program are those that have interfaces with their own fields" (Bursztyn & Drummond, 2014, p. 323). Interdisciplinary programs, courses, and research are often compared "to each evaluator's universe of reference" and "end up being evaluated not according to what they seek to be, but according to what they are not" (p. 323). This bias impacts faculty publications and course offerings, as well as applications for internal funding and awards.

Solutions: Retrofitting the Ivory Tower to the 21st Century

Despite these barriers, the challenges that we face present exciting opportunities where a focus on sustainability and interdisciplinary collaboration could result in innovative solutions that are economically advantageous, environmentally beneficial, and socially enriching for universities and colleges, their students, and their greater communities. Adapting to the 21st century necessitates a change in how we create and disseminate knowledge, and how we prepare our students to contribute professionally and personally to society and their communities. This is not the time to pare down to basic concrete skills and eliminate programs and curricula because they do not provide evidence of direct, shortterm, quantifiable markers of economic profitability and success. A leaner, streamlined education is not necessarily a more valuable or competitive one. Nor is it the time for faculty to shore up their disciplinary walls against outside attack and critique. We have to be better than that to move toward a more evolved future. Fortunately, there are good models out there for meeting those challenges, and many ideas that can be drawn on and applied to solutions that fit a variety of higher education institutions.

We must work on innovations in general education guided by institutional missions to support the goals of sustainability and the intellectual and skill-based needs associated with solving complex problems. Successful transformation of general education cannot be achieved without clear goals and learning outcomes articulated to students as well as to advisors and faculty. Faculty and higher education institutions must also develop and support pedagogies that apply innovative approaches to teaching and learning at the same time that they prepare students with skills that make them employable and perspectives that make them thoughtful, engaged citizens. Sustainability across the curriculum workshops such as those offered by the Association for the Advancement of Sustainability in Higher Education (AASHE) provide good models for developing and implementing such changes, as well as excellent leadership support. Such pedagogies would also make use of community and industry partnerships, working closely with partners to incorporate applied experiences, complex problem-solving, and cross-course collaboration at the same time that they expose students to multiple perspectives and ethical aspects of real-world issues, history, the arts, and a variety of methodological tools. Students also need more integrated opportunities for internships, co-op programs, and service-learning to help them engage and

see the connections between their education and their work in the world. Building these opportunities and their associated partnerships in local communities fosters professional development as well as community enrichment as both the institution and its neighbors share resources and knowledge.

At the same time, not only must faculty be given the opportunity to address sustainability challenges in their teaching and research, but problem-oriented, interdisciplinary collaborations and public outreach should be incentivized. Higher education institutions are incubators of talent, energy, and innovation, but individuals willing to take these things beyond the institution must be encouraged and supported in doing so. Although these are not new ideas, incorporating them in a coordinated way with clearly articulated learning outcomes and evaluation criteria at a programmatic or institutional level is rare. To do so will require early adopters and volunteers, supported by their administrations and boards of trustees, to collaborate on establishing these new planning documents, goals, outcomes, and assessments, and providing informational and training workshops for faculty and staff.

The retrofit of the ivory tower in practice needs to be tailored to each individual institution and its regional community. What works for a research institution will not be the best fit for a regional comprehensive state university or private liberal arts college. To be truly successful, pedagogical transformation and interdisciplinary collaboration require careful consideration of how individual disciplines link to others, how knowledge and skills transfer to other disciplines and beyond the academy. This intellectual work is critical to moving ourselves and our students toward a social transformation that is ecologically and economically sound as well as socially and culturally just. The most productive and effective adaptations will not be driven by economic models but will come from various stakeholders at institutions and within their communities working together to define shared values and priorities that will shape innovative reforms. Fortunately, there are successful models out there that can serve as inspiration for such changes.

Amey and Brown (2005) discuss three stages for developing interdisciplinary collaboration along the dimensions of disciplinary orientation, knowledge engagement, work orientation, and leadership, based on their study of an interdisciplinary group working on a university-community partnership project. As part of its revision of its core curriculum, Unity College in Maine (*n.d.a*) articulated learning outcomes for the environmental citizen, organized into three areas—resourceful individual, engaged citizen, and environmentally informed graduate. Arizona State University's Institute for Humanities Research (*n.d.*) compiled a list of contributions the humanities make to sustainability, which could be a useful starting point in developing learning outcomes for an interdisciplinary, problem-oriented general education that considers today's global sustainability challenges. The National Leadership Council for Liberal Education and America's Promise (LEAP) (2008) has outlined essential learning outcomes as well as seven principles to achieve these outcomes, and these support the kind of knowledge and skills that sustainability and problem-solving require. Tarrant and Thiele (2016) provide a summary of sustainability education learning outcomes developed by Tillbury (2011), Wals (2012), and other sources (*p. 55*). They synthesize these outcomes to provide the following core set of sustainability skills:

- critical thinking and systems thinking skills, which facilitate investigative, integrative, and holistic thought, navigation between tradition and innovation, and the clarification of values; and
- communication and collaboration skills, which facilitate the empowerment of students as adaptive and interactive lifelong learners, stewards for conservation, and agents of change. (*p.* 55)

When developing learning outcomes, it is important to clearly define skills and content objectives tied to programs and institutional missions, and to develop concrete, meaningful assessment that aims for connective transparency between content and associated skills. For example, Williams (2015) addresses the ubiquitous "critical thinking," defining it as "the highly valuable inquiry and interrogation prerequisite to problem identification; it involves the analysis of an argument's merits and faults. It is the process of judging, approving or disapproving." He argues that in addition to critical thinking, we need to educate students in *constructive* thinking. He explains, "The identification of problems made possible by critical thinking is useful only if it gives rise to the *problem solving* of constructive thinking. The desired endgame is problem solving, not critical thinking for its own sake" (emphasis in original).

In addition to critical and constructive thinking skills, many proponents of sustainability education, like Tarrant and Thiele (2016), emphasize the need for systems thinking, or "a basic capacity for recognizing and understanding complex situations in terms of their boundaries, drivers, adaptive processes, and the direct and indirect interactions of their component parts" (*p. 58*). Wood (2012) also calls for an emphasis on systems literacy, "interdisciplinary research practice and pedagogy that calls for intellectual competence (not necessarily command) in a variety of fields" (*p. 4*). Such skills can be introduced through general education content in a variety of ways, and certainly align well with the goals of many disciplines.

As noted earlier, the discussion of skills versus content can cause tensions, and Berrett (2016) addresses the challenges that disciplinary content experts can face when expected to also deliver transferable skills. However, he cites Emory University's successful initiative to develop curriculum around transferable skills without content becoming a mere conduit for skills. In its "campuswide skills-teaching effort," Emory focused on using and evaluating evidence, offering 27 first-year seminars across more than 20 departments. Berrett (2016) notes, "As different as disciplinary definitions of evidence may be, faculty members here say the effort has given them a curricular focus and shared vocabulary, allowing them to discuss teaching and learning in new ways."

The initiatives at institutions like Unity, Emory, and others show that we can retrofit the ivory tower to the 21st century. Disciplines and interdisciplinarity can coexist and strengthen each other. Courses can offer content expertise and transferable skills, and universities can coordinate across their campuses to develop shared values and general education learning outcomes that are socially relevant. For example, an interdisciplinary, problem-oriented general education course should consider multiple goals what knowledge and methods can each discipline contribute to identifying, understanding, and solving a particular problem? How can the course introduce students to this while also providing opportunities to learn and apply skills such as critical, constructive, and systems thinking, teamwork, and communication while encouraging the development of the personal traits of self-reflection, ethical integrity, and a commitment to inquiry?

Beyond general education, a retrofit could also spur productive innovations in individual departments and graduate education. For graduate students in particular, Moslemi et al. (2009) found that there is often an insufficient focus on professional development for nonacademic careers, due to a variety of factors such as lack of funding incentives, no structure or support (academic or financial) in place to facilitate the completion of an internship plus thesis or dissertation within a reasonable time frame, and lack of an administrative structure for setting up internship options (*p. 519*). Supporting our students in their professional development makes them more successful by helping them make relevant connections between their education and their careers, and introducing them to a variety of career opportunities. Individual departments can also draw on available models to tailor changes to their own disciplines, careers, and community connections, and find ways to work with other relevant departments on interdisciplinary opportunities that include applied experiences outside the institution.

Bursztyn and Drummond (2014) propose the star model as an innovative framework that has the potential to integrate disciplines in ways necessary to true interdisciplinary research initiatives (p. 314). They found that when research efforts aimed to be comprehensive "rather than problem-oriented . . . the result was indeed inevitably shallow" (p. 315). However, a problem-oriented focus geared toward "addressing of a complex problem and then searching for the various disciplinary contents that could answer it" leads to more rigorous, substantial results (p. 315). The key for each individual contributor is to begin by working from within that individual's disciplinary training and expertise, bridging into other areas in search of contributions from other fields once that foundation is firmly established (pp. 315-316). Approaches must be grounded in the theoretical and methodological frameworks of disciplines that then contribute to the larger complex problem research must build on and connect to other work, laying a foundation and not simply making bricks, but contributing solid, quality bricks to a larger, cohesive structure.

Bursztyn and Drummond (2014) suggest that universities and colleges might look to problem-oriented nonacademic research institutions (NARIs) for models of how to organize interdisciplinary programs and research groups as epistemic communities. A problem-oriented approach that addresses larger issues like climate change and food security yet also bridges with communities, businesses, and nonprofits to address these and other local issues can both provide applied education for our students and build social capital between institutions and their communities. We need not only to suffuse disciplines with sustainability awareness, but also build interdisciplinary teams of researchers that bring appropriate disciplinary methodologies and knowledge to sustainability problems. Prioritizing such an approach can also, as Bursztyn and Drummond (2014) note, enhance "the legitimacy and usefulness of University output" (*p. 323*).

With major funding agencies supporting problem-oriented research that requires interdisciplinary collaboration, institutions

of higher education would also benefit from having at least one grants specialist on staff who knows the strengths and expertise of the institution, its faculty, staff, and students; can identify grants that match those strengths and even regional needs; and can build interdisciplinary teams of faculty, students, and staff, essentially spearheading the process and catalyzing the kinds of collaborations local and global sustainability challenges require. Sam Houston State University is one example of an institution that created such a position several years ago and saw a significant increase in grantgenerated funding as a result. Creating at the institutional or college level a position or positions dedicated to grant prospecting, writing, team building, and development can not only increase an institution's pursuit and acquisition of grants, but also support and facilitate interdisciplinary research and education while developing meaningful partnerships outside the institution and raising the institution's impact in the community and the public sphere.

We need progressive reform in general education curricula; disciplinary curricula; pedagogical approaches; retention, tenure, and promotion criteria and procedures; and criteria for recognition and career advancement. We need faculty, administrators, and governing units to educate themselves on sustainability and interdisciplinarity, focusing on how each is defined, understood, and practiced on their campuses, or how they could be integrated to enhance the institution's mission and success. To achieve reform, we need campuswide discussions, as well as professional development focused on sustainability, interdisciplinarity, and problem solving, with respect to content, pedagogy, and learning outcomes. By extension, administrators, faculty, staff, students, and communities need to reflect on the ethical integrity of their mission and need to understand higher education as more than a business. These reforms should not be imposed in ways that infringe on intellectual freedom—personal teaching and scholarship. But it is hopeful that an increasing number of faculty, supported by their administration, will voluntarily consider the social relevance of their work and seek new ways to partner with their communities and collaborate in teaching and research. In fact, working with all stakeholders to develop adaptations will result in stronger investment by the university or college and surrounding community. Administrators need to familiarize themselves with the issues and find ways to use interdisciplinary, problem-oriented research and education to address fiscal challenges in innovative ways. Leaders of professional organizations must also encourage discussions regarding these issues at professional meetings and in their associated journals find

ways better to facilitate and support problem-oriented research and reduce disciplinary barriers that hinder interdisciplinary innovations, while maintaining academic rigor.

Conclusion

In 1977, Lovins warned, "We must be wary of the danger of not being imaginative enough to see how undetermined the future is and how far we can shape it" *(cited in LeMenager and Foote, 2012, p. 577)*. Institutions of higher education are valuable incubators for inquiry, discovery, and innovation, and are essential to critically challenging dominant views to prevent narrow or limited thinking. Faust *(2009)* emphasizes, "Higher education is not about results in the next quarter but about discoveries that may take—and last decades or even centuries" *(p. BR19)*. Addressing global and local challenges requires innovation, collaboration, and a long-term view that weighs economic, social, cultural, and environmental interests.

Mulkey (2012) asserts, "Like much of America, higher education must get its head out of the 20th century and leave behind inappropriate business models" (p. 357). An economically driven model is not a balanced one. Like global sustainability challenges, the university crisis will require major changes to resolve. Driving these changes must be a willingness to prioritize an interdisciplinary, problem-oriented focus within education and research that facilitates and supports community and industry partnerships to address the increasingly complex global and local needs of the 21st century.

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RESEARCH ARTICLES

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Utilizing Domestic Off-Campus Experiences to Influence Social Justice Awareness and Career Development

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Abstract

This study examines the transformative experiences of a group of academic coaches who participated in the Target New Transitions (TNT) program during the 2014–2015 academic year. The TNT program trains undergraduate students, through professional development workshops and reflective exercises, to serve as year-round academic coaches for first-year students in Chicago's most impoverished high school districts. Semistructured interviews were conducted with 20 academic coaches in order to understand the transformative nature of the program in relation to social justice learning, translatable skills and values, and career development. Findings demonstrate that significant learning occurred in relation to coaches' awareness of social justice issues, including issues of power, privilege, and systemic causes of inequality; that learning was translatable to other academic and nonacademic settings; and that many students developed greater commitments to public service careers. Implications are also presented for colleges interested in further anchoring their institutional commitments within their local communities.

Keywords: social justice, career development, off-campus experiences

Introduction

There are myriad ways in which a college or university can anchor itself within the surrounding local community and help to improve the quality of life of its members (*Taylor & Luter, 2013*). Building reciprocal partnerships in which both communities and institutions learn and benefit from one another (*Dubb, McKinley, & Howard, 2013*) offers great promise in addressing the most pressing social issues facing local communities. A host of potential benefits also accrue to those students who participate in domestic off-campus learning opportunities, including "a greater understanding of the interrelationship that exists between what they know (knowledge) and how they think (awareness or disposition) and act (skills)" (*Sobania, 2015, p. 24*). Thus, college programs that intentionally situate undergraduate students in their local communities to address pressing social problems, such as gaps in educational achievement or college access, may be particularly powerful in their potential to benefit local community members *and* undergraduate students.

The Target New Transitions (TNT) program, a grant-funded initiative supported by state, federal, and private monies, was aligned with these reciprocal purposes in mind in trying to achieve the following goals:

- 1. Provide first-year students attending the most impoverished high schools in the Chicago Public School (CPS) system the academic, social, and emotional support to successfully transition into high school and realize their future educational and vocational goals;
- 2. Train undergraduate college students to become academic coaches that provide CPS students with ongoing mentoring, support, and access to different resources and social networks to realize their future goals.

The TNT academic model was a derivative of a 2002 program at Loyola University Chicago titled Who Wants to Win a Scholarshit (TNT, 2016). Modeled at the time on the popular reality show Who Wants to Be a Millionaire, the program engaged hundreds of high school students in a televised scholarship competition that was funded through a GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) grant. GEAR UP, which is administered by the U.S. Department of Education, is designed to increase the number of low-income students who are prepared to enter and succeed in postsecondary education. CPS students in Who Wants to Win a Scholarship were matched with undergraduate students at Loyola University Chicago, who acted as academic coaches and provided 4 hours of coaching every Saturday morning to prepare the students for the competition, which awarded over \$750,000 in scholarship funds. The scholarship challenge evolved into a team-based competition in 2006, which allowed more students to participate.

The TNT academic model was formally launched in 2008 with multiple CPS schools, and the current study examines the experiences of academic coaches in different high-poverty high schools on Chicago's South Side. First-year high school students attending the TNT program do so on a voluntary basis, often learning about the program from their teachers, past students, or signs that are posted throughout the school. The TNT program begins by recruiting, interviewing, selecting, and training undergraduate students as academic coaches who commit to spending 4 hours every Saturday morning at one of the CPS schools. Although the TNT program is a voluntary, paid, noncredit opportunity, academic coaches' motivations to join the program include gaining teaching experience, giving back to their communities, and generating extra income to use toward college expenses. The academic coaches receive professional development training throughout the academic year that is focused on the academic priorities of the high school students, processing their experiences in the CPS school system, and reflecting on their own social identities in relation to issues of power, privilege, and positionality.

Before beginning the TNT program, students attend a 2-day orientation that incorporates several experiential-based activities designed to heighten their understanding of their own privilege, recognize important stages of adolescent development, learn communication strategies, and understand their roles and responsibilities as academic coaches. The professional development activities continue throughout the academic year, offering three 4-hour sessions that focus on a wide range of topics (The TNT professional development activities are described in more detail at https:// www.luc.edu/tnt/aboutus/academiccoaching/professionaldevelopment/). Empirical data has demonstrated the impact of the program on the high school students through math and reading improvements and significantly higher graduation rates compared to a control group of non-TNT participants (TNT, 2013); however, the impact of the TNT experience on the learning and development of the academic coaches has yet to be documented. This latter point is of particular significance given the reciprocal nature of service-learning programs and the importance of understanding the impact of the experience on both community members and student participants.

Purpose and Significance of the Study

The focus of the current study is to more closely examine the impact of the TNT program on the learning and development of the academic coaches. In particular, we conducted semistructured interviews during the 2014–2015 academic year with 20 academic coaches to better understand how their involvement influenced their understanding of social justice issues, provided transferable learning, and affected their career development. This study is significant on many levels. First, we hypothesize that such experiences can be transformative for the academic coaches as they encounter and interact with individuals from diverse backgrounds, leading

them to a greater understanding and appreciation of the systemic and structural forces that perpetuate and reproduce inequality, and of their own agency to work for social change and make a difference in the lives of others. Second, we believe this experience may also influence the career trajectories of the academic coaches, as many who never considered a career in public service find a new awakening through their participation in the TNT program. Finally, we believe the study provides an important example of how colleges and universities can utilize their own human capital (i.e., undergraduate students) to address community-based needs while concomitantly improving their students' awareness and understanding of social justice issues.

Literature Review

In the following review, we examine literature that demonstrates the potential for domestic off-campus experiences to influence participants' learning and development. Although numerous studies have examined the effects of such experiences on student development, we focus our review on those studies that are most closely linked to the social justice and career-oriented outcomes under investigation in this study. Furthermore, although domestic off-campus experiences appear in numerous forms (e.g., alternative spring break, internships, community-based service; see *Sobania*, *2015* for a further review), our review focuses primarily on service-learning experiences, given their congruence with many of the programmatic components that constitute the TNT academic coaching experience.

Service-Learning Experiences

Service-learning represents an important "high-impact" (*Kuh*, 2008) educational practice that "integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities" (*NSLC*, 2008, para. 1). Development, however, is not simply an artifact of embedding oneself within a community-based experience; rather, development occurs through a reflective process in which participants are regularly challenged to make meaning of their experiences, especially when those experiences include opportunities to engage in meaningful interactions across important group differences (*Einfeld & Collins*, 2008; Jones & Abes, 2004; Keen & Hall, 2009; Lechuga, Clerc, & Howell, 2009). The TNT program, in particular, provides students with professional development activities, reflective writing assignments, and opportunities to interact across differences throughout the academic year that focus on asset-based thinking (*Cramer & Wasiak, 2006*); issues of power, privilege, and positionality; team-building; and culturally responsive interventions.

Service-learning and social justice. Service-learning and community-based experiences have been linked to a number of cognitive, intrapersonal, and interpersonal outcomes that are aligned with principles of social justice. For instance, studies have demonstrated that service-learning programs have the potential to broaden students' understanding of social and cultural issues (Lechuga et al., 2009; Vogelgesang & Astin, 2000), which is especially true when students are placed in communities that challenge their preexisting stereotypes and unrecognized privileges (Jay, 2008; Rockquemore & Schaffer, 2000). In these situations, students must often struggle to reconcile their preconceived notions with what they are experiencing in the community, which often leads to an internal struggle in which students must reevaluate their current belief systems (Jones & Abes, 2004). Such a struggle with one's identity can facilitate greater introspection around the concepts of privilege and socialization, which can often facilitate more complex attributions for societal problems and deeper understandings of the myriad identities that are located within a particular milieu (Eyler, Giles, & Braxton, 1997; Jay, 2008; Rockquemore & Schaffer, 2000). Finally, research has shown that service-learning experiences can increase an individual's civic and social responsibility (Kuh, 2008; Myers-Lipton, 1998), which can foster deeper connections to giving back to local communities.

As noted above, the primary mechanisms that drive social justice learning are steeped in the reflective and meaning-making activities that surround the service-learning or community-based experience. Reflective activities, in particular, can help students examine their beliefs and assumptions while prompting the search for alternative viewpoints that can lead to more complex understandings of societal issues (*Brookfield*, 2010). According to Preskill and Brookfield (2009), learning to critically reflect allows individuals not only to become informed leaders, but also to take action and confront social injustices. Ongoing reflection helps with the development of "the relationship between self and other (intrapersonal); shifts in the nature of commitments made, including career plans and aspirations (interpersonal); and increased open-mindedness about new people, experiences, and ideas (cognitive)" (Jones & Abes, 2004, p. 153). In the TNT program, academic coaches regularly

interact with students from backgrounds very different from their own, and in doing so, they encounter many of the systemic and oppressive issues that the CPS students face on a regular basis.

Service-learning and career development. Service-learning experiences can also benefit participants as they integrate their experiences into their career discernment process. Greenhaus, Callanan, and Godshalk (2000), for instance, demonstrated that different community-based experiences (e.g., internships, cooperative education programs, apprenticeships) can bolster students' self-concept, improve their understanding of various career choices and organizational environments, and allow them to evaluate the fit between individual characteristics and the demands of different jobs. In particular, researchers have found that service-learning experiences can influence the choice of a service-intensive career and future plans to participate in service after college (Astin, Vogelgesang, Ikeda, & Yee, 2000). Jones and Abes (2004) further posit that community-based experiences can increase students' commitments to socially responsible labor. However, students do not always commit to changing their careers to service-minded positions; rather, they become more aware of systemic issues and take on citizenship-like practices to help effect change in the community. Thus, under the right conditions, service-learning and community-based experiences can help students discern their potential fit in nonprofit and public-service careers and disrupt previously held ideas around their career trajectories.

Conceptual Framework

The conceptual framework is steeped in the previous review of literature that suggests that structured, domestic off-campus experiences are potentially potent avenues to foster student learning and development (*Sobania, 2015*). When these experiences incorporate opportunities for students to encounter differences, especially in communities or milieus that are unfamiliar, coupled with opportunities to reflect on and process such experiences, students can gain a deeper understanding of societal issues while concomitantly reflecting on their future commitments (*Jones & Abes, 2004*). This type of development is particularly effective when it occurs over a longer duration and provides opportunities to develop reciprocal relationships with community members who challenge pre-existing notions related to important social justice concerns (*Jay, 2008; Rockquemore & Schaffer, 2000*).

Method

We adopted a social constructivist perspective in approaching the study's main research questions: How does the TNT program influence the academic coaches' learning for social justice? Is this learning transferable to other settings? Also, how does the TNT program influence the academic coaches' career development? In a social constructivist approach "individuals develop subjective meanings of their experiences-meanings directed towards certain objects or things . . . leading the researcher to look for the complexity of views rather than narrow meanings in a few categories or ideas" (Creswell, 2014, p. 8). Thus, meaning-making is conceptualized as a subjective process that is rooted in the interactions one has with others as well as the sociohistorical norms and values that shape organizational culture. In adopting such a social constructivist perspective, we recognize that an individual's perspective is based both on the campus norms and expectations related to social justice and on interactions with different campus and community stakeholders involved in the TNT program.

Qualitative Interpretative Approach

In developing a general understanding of how participants make meaning of their experiences as academic coaches, we used an interpretative qualitative approach steeped "in understanding the meaning a phenomenon has for those involved" (*Merriam*, 2009, *p.* 22). In this study, we were specifically interested in understanding how academic coaches experienced their roles as coaches, and in what ways, if any, this influenced their perspectives on social justice and future career commitments. In employing this framework, we assumed that participants' experiences are socially constructed and multiple—that the unique context under which participants are performing as coaches will both frame and position their experience as potentially different from those of others (*Merriam*, 2009).

Sampling Frame and Data Collection Procedures

After obtaining IRB approval, we used a purposeful sampling frame in which we invited academic coaches, during one of their professional development workshops, to participate in individual semistructured interviews. We invited all of the academic coaches (i.e., total of 45) to participate in individual interviews, which resulted in 20 academic coaches agreeing to participate in the interview process. Of the 20 participants, nine identified as male and 11 as female. Additionally, eight participants identified as White, eight as Asian, one as Latino, and three as mixed race. Five of the participants were in their second year of college, eight were in their third year, and the remaining seven were in their fourth year. In terms of academic majors, three participants were majoring in education, six were majoring in the sciences, and 11 were majoring in the social sciences. All of the individual interviews occurred on the home college campus after students had participated in the program for the full academic year (mid-April), and each lasted approximately 30 minutes. Prior to beginning the interviews, participants completed an informed consent and short demographic questionnaire. All interviews were recorded and later transcribed for analysis.

Interview Protocol

The semistructured interview protocol incorporated six different sections. The first section addressed the preliminaries of the study, including the study's purpose, the structure of the interview, and a discussion of confidentiality and consent. The second section focused on the reasons for becoming an academic coach and initial expectations for the position. The third section examined the coaches' experiences in both professional development sessions and academic coaching sessions, focusing on specific experiences that were memorable, challenging, or possibly resulted in learning. The fourth section examined whether any of the coaches' views on social justice or educational equity had changed as a result of the program. The closing section examined whether the experience influenced their thinking about their future careers, with additional questions pertaining to suggestions for improving the program.

Data Analysis

We used a constant comparative method that consisted of both open and axial coding procedures to analyze the interview data (*Creswell, 2014*). The constant comparative method is an iterative process in which information is gathered and analyzed throughout the collection of data, enabling researchers to recognize initial themes while still allowing for concomitant themes to emerge until saturation is reached in the data collection process (*Creswell, 2014*). During the open-coding stage of analysis, we analyzed a subset of transcripts based on three interviews. At the completion of this initial stage of analysis, the researchers met to identify the "central phenomenon" that emerged from the data collection and resultant open coding (*Creswell, 2014*). The researchers then employed axial coding to identify a more refined set of categories and subcategories that captured major learning and developmental themes that emerged from the data. After establishing an acceptable level of interrater reliability (*Cohen's kappa* > .70), we proceeded to individually code each of the remaining interviews based on our agreedupon coding rubric, while still allowing new themes to emerge when examining the full set of transcripts.

Trustworthiness and Research Positionality

Unlike quantitative methods, which present internal and external consistency in terms of numbers, qualitative methods examine the overall trustworthiness of a study by assessing the credibility, transferability, dependability, and confirmability of the results (*Lincoln & Guba*, 1986). We utilized a number of methods, including multiple peer reviewers, checking for interrater reliability, member checking, and keeping an accurate record of our procedures throughout the analytic stage. Because each member of the research team identifies differently across social identity groups and has different levels of experience working in public school systems, we discussed our assumptions surrounding inequality and access throughout the process, making sure to acknowledge our biases throughout the process of gathering and analyzing our data.

Limitations

We encountered several limitations in this study. First, we were able to interview only 20 of the 45 academic coaches; thus, our results represent only a subset of academic coaches who worked during the 2014-2015 academic year. Second, our data collection relied primarily on semistructured interviews, and some of the questions were more retrospective in nature, especially those that asked students to reflect on their initial reasons for selecting into the program or the substance of a particular professional development session. Third, we relied on the participants' description of their learning in their own voices, and although we triangulated their responses with our own observations, we recognize the possibility that our own biases may have influenced the manner in which we probed certain questions and elicited different responses. Finally, we are cognizant that the students in the study were also engaged in different campus activities and coursework, all of which may have contributed to their overall learning from their TNT experience. Future studies that implement a causal design will be helpful in teasing out these exogenous influences.

Findings

We organized our findings around two major themes: learning related to social justice and career development. In the section that follows we present information about the relevant themes we uncovered in our analysis, highlighting key verbatim passages that illustrate particular themes (see Table 1).

Social Justice Learning

We uncovered a number of themes related to students' social justice learning. In particular, we noted themes related to their awareness of social justice issues, especially as coaches were better able to see the world through the unique perspectives of the high school students. Social justice learning was also facilitated through the coaches' own reflective process, particularly as they reflected on their own privileges and became more aware of the systemic issues facing the school systems in which they were working. In some cases, this learning also led to specific actions and commitments to furthering social justice. Finally, students also discussed the ways in which they had acquired skills and values that were transferable to other areas of their lives.

Awareness of issues. The interview data revealed several instances in which the academic coaches reported an increased awareness of educational disparities impacting the students they worked with: lack of resources and the quality of education students were receiving, the achievement gap, and violence and poverty impacting students' communities. Such increased awareness can provide the initial conditions in which coaches begin to situate their observations within a broader societal context.

Academic coaches repeatedly used words and phrases such as *disheartening, injustice, unfair, disparities, inequality, lack of access, and unequal funding* when describing their reflections on the issues students face. Two academic coaches grappled with their observations of the uncleanliness of the students' school, including the cafeteria where students eat every day, wondering what type of message this sends to students who attend this school. Many academic coaches described feelings of frustration and anger as they reflected on these observations. As one academic coach explained, "it's just really unfair and it makes me mad." It is evident through their reflections that the TNT program provided many students with the opportunity to step outside their own experiences to better understand the experiences of others in a very tangible and real way. As one academic coach put it, "I always knew there was

Theme	Definition	Example Quotation
Social justice learning: Awareness of issue	Student shows awareness of issues that youth face.	"I always knew there was inequality, but I never had a pictureit [TNT] definitely gives a hands-on experience."
Social justice learning: Perspective taking	Student declares understanding the youth by taking their perspective.	"I think the biggest thing that it's [TNT] taught me is to really, really step away from the statistics that you read. Step away from what you see on the news and look at the individual."
Social justice learning: Reflecting on privilege	Student reflects on privilege and showcases social justice learning.	"My experiences in life have been so, so, so different."
Social justice learning: Awareness of systemic issues	Student shows awareness of issues that the education system creates for youth.	"The system is failing them [the students] it's not the students who are failing."
Social justice learning: Action/commitment	Student projects their action/commitment to social justice.	"Continuing to help people in the community beyond the TNT program."
Transferable learning: Skills	Student proves they have learned transferable skills.	"[It] helped me with asking the right questions and knowing when to seek out help."
Transferable learning: Values	Student proves they have learned transferable values.	"Students that I work with are on my mind when I come home so you really learn how to value human life and care for people."
Career development: Vocational discernment	Student recognizes that this program will help them with their vocational discernment.	The program helped them look inward and think about "what really makes me really happy."
Career development: Public service	Student experience inspires a future commitment to public service.	"I don't plan on teaching anywhere except for in a public school that actu- ally needs some help, with students that actually need help, and TNT has been a contributing factor for sure."

Table 1. Overview of Thematic Findings

inequality, but I never had a picture. . . . it [TNT] definitely gives a hands-on experience."

Perspective taking. In addition to increasing their awareness of educational inequality, the data also suggest that the TNT experience provided many of the coaches with opportunities to better understand the unique perspectives of their students. Many academic coaches talked about stepping outside their own high school experiences to better understand their students' unique lived experiences. As one coach discussed in the interview, "I would say to discard different stereotypes that one would have to be openminded, accepting, and tolerant to learn about others." Another academic coach summarized her biggest takeaways from the TNT program as tied to taking on others' perspectives in order to validate the dignity and commonalities in everyone's lived experiences:

I think the biggest thing that it's [TNT] taught me is to really, really step away from the statistics that you read. Step away from what you see on the news and look at the individual... Don't look at what they're wearing or what their race is, or the way they speak, or the things they say. Just look at the person who they are at the core, because we're all really the same at the core, and we all want the same things for the most part.

Reflecting on privilege. In addition to acknowledging the experiences of students while working to better understand their perspectives, the data also suggest that several of the academic coaches were able to reflect on their own privilege through their experiences with the TNT program. Academic coaches reflected on their backgrounds and upbringings by using words and phrases such as *sheltered, privileged*, and *appreciative*. One academic coach shared that he had considered himself underprivileged, but comparing his experiences to those of the high school students was a very eye-opening reflection. This coach further elaborated that his ability to go home each night to food, shelter, and other necessities made him rethink the perspective he once held and better understand his own privilege.

Many academic coaches acknowledged that students they interact with have backgrounds, stories, and experiences vastly different from their own. One coach explained that "the stories they would tell about hearing gunshots—that is something I never experienced . . . that never crossed my mind as a kid to think to hear them or anything," while another shared very simply that "my experiences in life have been so, so, so different." Recognizing and acknowledging their own privileges and lived experiences are critical learning experiences associated with the TNT program, particularly in helping academic coaches better situate their own experiences and privileges within a broader societal context.

Awareness of systemic issues. The coaches' critical reflections on their experiences with the TNT program also suggested that many of the academic coaches demonstrated a burgeoning awareness of the systemic issues impacting the education system. Such reflections were useful in helping academic coaches understand the broader societal context of the issues students face. As one academic coach acknowledged, people are "born into [society] and it's a cycle . . . [it] puts things into perspective of how a lot of things aren't fair and it's out of your control in a way." Another coach made the statement that the "system is failing [the students] . . . it's not the students who are failing." Several academic coaches identified the need for the educational system to be reformed and for funding for schools to be more equitable. One academic coach took it a step further, critically examining the limitations of his role as a TNT coach, given these systemic disparities:

I'm putting a good impression on these kids and minimally helping to improve the system, but it's like putting a Band-Aid on a wound that needs stitches. There are large issues at play. It kind of makes you a little depressed because it's like I am helping the symptoms but not the causes of a lot of the issues.

Action/commitment to social justice. The data also revealed that many of the academic coaches articulated a commitment to social justice and a call to action based on their experiences with the TNT program. Many academic coaches shared how this experience sparked their passion for working with youth, and one described her desire to provide social-emotional support to students who are facing many external factors that directly impact their ability to learn. Several coaches also described a vested interest in "continuing to help people in the community beyond the TNT program," and another coach described her commitment to responding to systemic inequities.

Transferable learning skills. Through engaged learning experiences the students developed transferable learning skills that helped them acquire new abilities that they used at their home campuses and to prepare for their professional futures. The words "helped me learn" were mentioned in various interviews, highlighting the potential of the TNT program to improve the coaches' learning and development. For example, the academic coaches described several skills they acquired through the TNT program, including interpersonal skills in working with high school students, improved teaching skills, intrapersonal skills, and teamwork skills. As interpersonal skills, one coach indicated gains of "learning how to interact with kids that are a bit younger . . . and learning how to be very careful and tactful." However, it isn't only about interacting with high school students; it is also about engaging with them to facilitate their development. For instance, one academic coach mentioned learning how to "get them to see that they can succeed." This participant learned how to encourage others to believe in themselves, while simultaneously increasing her teaching skills. Other coaches discussed how their experience in the TNT program improved their facilitation skills and helped them learn to teach certain subjects. One academic coach captured how her teaching skills improved through working with diverse learners:

I can work with individual students and sort of teach them in a way that they'll understand that same topic. Because I know that not all students learn the same. Some are obviously visual learners, some are kinesthetic, so I like that I have the ability to find out how a student can learn something best and can use what I know to try and teach it that way.

Not only did several students gain teaching skills, the data suggest that they also obtained intrapersonal skills through their coaching experience. According to one participant, "This position made me open up because I had to facilitate discussions with students; I had to open myself up to students so they could open themselves up to me." Other intrapersonal skills mentioned by the coaches were patience and learning to ask the right questions. For example, one student stated, "I am a lot more patient," and another stated, "[It] helped me with asking the right questions and knowing when to seek out help." Finally, academic coaches also shared how they expanded their teamwork skills, especially in learning how to communicate across difference and work collaboratively with other team members. One participant stated, "I learned how to adapt to different kinds of personalities, whether it be fellow coaches or students I have to work with," and another shared having advanced in terms of "learning how to cooperate towards the [common] goal."

Overall, these findings suggest that participating in a domestic offcampus experience, like the TNT program, offers many students the opportunity to gain a variety of transferable skills.

Transferable learning values. Transferable learning values are described as values the participants gain through their interactions in the TNT program. These values are ones that coaches feel inclined to continue utilizing in the future. The data revealed that several participants learned meaningful values that included empathy, civic engagement, social responsibility, and social justice. Many of the coaches noted their increased empathy as they learned more about the experiences of the high school students they were working with: "Students that I work with are on my mind when I come home so you really learn how to value human life and care for people." Another coach shared how the TNT experience influenced the importance of civic engagement: "I think it was very eye opening, it made me passionate enough that I'll be sticking around TNT for another two years." Other coaches shared the importance of social responsibility: "We have students who don't take showers or [who] wear the same outfit every single weekend on Saturday mornings and aren't clean; stuff like that, it makes you want to make things better for these people because it is not right." Finally, most students learned the value of social justice. One participant noted how being a part of Loyola University Chicago and the TNT program truly impacted her perspective on social justice. She stated:

I just feel so lucky to be part of Loyola [which] has an emphasis on social justice. When we learn about teaching, we don't just learn the academic content, Loyola really focuses on having culturally relevant pedagogy, about having an understanding whose story is being excluded from history, about different resources that the schools have, and understanding the struggles that students might face... So, I think that Loyola has really broadened my social justice view and [I have] this desire to live the Loyola mission of being a woman for others. And I think that TNT is such an extension of that. I think that my educational background has really helped me with TNT, as well.

The values students learn from being academic coaches suggest different ways in which the TNT program may have a lasting influence of their future growth and development.

Career Development and Future Pathways

In examining the influence of the TNT program on the academic coaches' career development, we uncovered two related themes. The first theme related broadly to the ways in which the TNT program influenced the career development process of the academic coaches. The second theme examined how the TNT program influenced the future career trajectories of the academic coaches, particularly the ways in which coaches planned on giving back to their communities through public service careers.

Career/vocational discernment. A number of academic coaches commented on the ways in which their involvement in the TNT program helped them in their own career discernment process. For instance, several coaches discussed how their involvement in the TNT program helped them look inward and think about "what really makes me really happy"—a hallmark of the career discernment process. Additionally, in modeling the career discernment process for their students, several of the academic coaches who were nearing graduation were simultaneously thinking about their own careers, "realizing I need to figure out what I need to do so I can show them by example." For many of the coaches, their experience working with first-year high school students reminded them of their earlier dreams and the passion they had for different career options while in high school:

Seeing those kids, like, talking about what they love doing. It brings me back to that moment of when I did what I liked to do, like what I wanted do versus what my parents wanted me to do and I guess a lot of the times they talk about how they are so passionate about going into things like designing . . . and I'm just like, oh, wow, I remember having those types of dreams.

The experience of working directly with high school students also helped solidify the career pathways for several of the academic coaches. One coach, who was an education major, commented that through the TNT program, he realized that teaching was "something that I can do and something that I do enjoy doing. . . . I haven't been able to get that during student teaching as much." Another coach, who was a history and anthropology major, commented on how the coaching experience helped him realize that teaching was something he really enjoyed: I definitely realized that personally I enjoy teaching and explaining things, especially when kids have history homework. I like taking these complex events and breaking it down and explaining it in a way they can understand and use modern day examples or everyday kind of situations to compare to the past and that really I have realized that I enjoy it and I'm good at it helping make these things make sense.

For other academic coaches, the TNT experience may not have directly influenced their career goals, but it did influence how they planned on spending their gap year before going to graduate school. One coach commented that prior to going to medical school he planned on spending a year abroad helping students in a developing country learn English and math skills. "Without this position, I would have most likely never heard of that (opportunity abroad) . . . and at least now I know I have the ability to teach in a way some subjects, particularly math." Another coach, who was an anthropology and psychology major, discussed how her involvement in the program inspired her "to take a more qualitative approach to life . . . stepping away from statistics, away from quantitative information, because that just doesn't really do it for me anymore."

Careers in public service. For several academic coaches, the TNT experience inspired a desire to go into teaching after graduation and solidified their postgraduate plans: "I've always kind of had this idea in the back of my mind that I kind of sort of want to teach.... I feel like the idea is stronger than ever." Thus, for several coaches, the TNT program provided them with an opportunity to learn more about public service, and in several cases the experience made them "actually think about teaching because I enjoy it."

Academic coaches also discussed how the TNT program provided a "trial run" so that they could test the waters in terms of whether teaching or working in a high school was aligned with their career goals. In some cases, this led students to question their earlier career pathways: "I hadn't experienced anything like this, I didn't think about it. So it is definitely, definitely very interesting." And for others, it led to the decision to minor in education in order to pursue a career related to their TNT experience.

Finally, a number of academic coaches discussed how their TNT experience solidified a desire to give back to their communities and integrate public service into their postgraduate lives. For some, this was a commitment to work in the Chicago Public School system: "I really want to be part of making them [Chicago Public Schools] even better and just . . . I feel really connected to Chicago and this community." Another participant commented, "I don't plan on teaching anywhere except for in a public school that actually needs some help, with students that actually need help, and TNT has been a contributing factor for sure."

Discussion

In this study, we investigated three research questions that focused on how the TNT program influenced the academic coaches' learning for social justice, the transferability of that learning, and their career development. In doing so, we utilized semistructured interviews to learn more about the experiences of the TNT academic coaches and the extent to which those experiences were transformative in their learning and development. Several themes emerged from these questions, and we organized these themes around social justice learning and career development. Below, we examine these themes more closely, integrating relevant literature to highlight both the meaning and contribution of our findings.

The first research question examined the broader theme of learning for social justice, as prior research has demonstrated that service-learning programs can help students to broaden their understanding of social and cultural issues (*Lechuga et al., 2009; Vogelgesang & Astin, 2000*). Our findings lend additional support to the potential of domestic off-campus experiences to improve learning for social justice, as many of the academic coaches demonstrated an increased awareness of issues bigger than themselves and their own lived experiences. As a result of their experiences in the TNT program, many of the academic coaches articulated an ability to explore and grapple with social and cultural issues that exist on a systemic level.

Our research also underscores the important finding that interactions across difference, especially through structured programming, encourage critical reflection on one's own privileges, lived experiences, and inequitable access to resources and opportunities (*Jay, 2008; Jones & Abes, 2004; Rockquemore & Schaffer, 2000*). Our findings, for instance, suggest that students are not only able to reflect on their own privileged identities and experiences, but that they are also able to see the world through the eyes of the students they are serving. In taking the perspective of another, students must often grapple with their own unexamined stereotypes and biases, which can foster a reevaluation of one's belief systems and a greater empathetic connection with individuals whose life circumstances are very different from one's own background (Jones & Abes, 2004). The academic coaches in this study were not only able to identify differences when comparing their experiences with those of the high school students, they were also able to validate the human dignity of these students and understand them on a deeper, more profound level (Eyler et al., 1997; Jay, 2008; Rockquemore & Schaffer, 2000). As one academic coach mentioned, "we are all really the same at the core, and we all want the same things for the most part." Lastly, our results add to the extant literature that demonstrates the value of service-learning experiences for students' lifelong commitments to acknowledging and responding to social inequities (Jones & Abes, 2004). This type of lifelong commitment demonstrates one of the most significant benefits of service-learning experiences in encouraging civic-mindedness and helping students continue to consider their context and impact within society.

The second research question analyzed the transferable learning skills and values that the academic coaches gained through the TNT program. Much of the literature focuses on how servicelearning experiences are meaningful due to the service and reflection process (NSLC, 20008) rather than the transferability of that learning to other school and professional settings. The coaches in the study learned interpersonal, intrapersonal, teaching, and teamwork skills, but the most important theme that coaches alluded to was the fact that these were transferable skills that they could utilize in myriad academic and professional environments. Through a combination of orientations, workshops, and retreats coupled with practical, hands-on experiences at the schools, the coaches were able to learn a range of skills that were profoundly ingrained in their professional development. For example, one coach professed how working in the TNT program provided a valuable lesson of when to ask for help, which is important to know when working in any environment. These findings also strengthen the argument about the value of high-impact practices, such as service-learning (Kuh, 2008), and their potential to provide transferable learning skills needed throughout one's career.

In addition to gaining transferable learning skills, the academic coaches gained transferable learning values. Although the coaches described numerous values that were applicable to their futures, many of them associated their TNT experience with learning values such as empathy, civic engagement, social responsibility, and social justice. Many participants learned to develop new values by discerning through old ones and comparing their own upbringings to those of the students they served. This process allowed the coaches to decide what was truly important to them. Above all, most participants noted a greater sense of empathy and care for others. Additionally, they shared their desire to continue to serve others and the responsibility they felt to do so. This finding resonates with other research that has demonstrated how servicelearning supports the development of personal and civic identities (*Ash, Clayton, & Atkinson, 2005*).

Our final research question investigated how involvement in the TNT program influenced coaches' career development and future commitments. In several instances, the academic coaches described ways in which their experiences in the TNT program assisted them in their career discernment process. Research on high-impact practices has demonstrated that internships, cooperative education programs, and apprenticeships can help students develop a self-concept, gain an understanding of various career choices and organizational environments, and check for fit between individual characteristics and the demands of different jobs (Greenhaus et al., 2000). Service-learning, in particular, has been shown to foster students' choice of a service-intensive career and plans on participating in service after college (Astin, 2000). Numerous coaches in our study felt a calling toward public service careers because of their involvement in the TNT program, which strengthens the idea that experiences outside of the classroom can be influential in making postgraduate career plans and discerning among different options in for-profit and service-related careers.

Implications

Solutions to college access are complex, multifaceted, and cut across individual, community, school, and state and federal policy levels (*Perna, 2006*). Too often access-based solutions overlook the abundance of human capital available at our nation's colleges and universities, as well as the ways in which colleges can structure experiences for undergraduate students to perform service, reflect on critical social justice issues, and simultaneously provide our nation's most impoverished schools with additional resources to ensure that every student has an opportunity to be successful in school. The TNT academic coaches, in many cases, form lasting mentoring relationships with the CPS students they work with, and many continue these relationships after formally leaving the program or graduating from college. The experiences not only help to dispel many of the myths about inner city students, but also help the coaches develop a more critical understanding of the root causes of inequality while leading to a transformational shift in how they see themselves as advocates for social justice and their future roles as engaged citizens working with and giving back to communities in need.

As colleges and universities consider how they can further anchor their institutions within their surrounding communities, it will be important to bring together community and campus stakeholders to collectively discuss their most pressing social concerns. Hopefully, these discussions will lead to the recognition that many solutions to critical social justice issues can be addressed through reciprocal partnerships that provide opportunities for campus constituents (i.e., students) and members of the community to learn from each other. The empirical data gathered from this study converged around the potential for programs like TNT to change lives in a reciprocal manner as both students and coaches take on simultaneous roles as teachers and learners.

Future research is certainly needed to advance an understanding of how institutions can use domestic off-campus experiences to advance learning and social change. More research, for instance, is needed in understanding how such programs work across different social identity groups and whether any of the outcomes addressed in this study are conditional on these group differences. Future studies can also examine the sustainability of the outcomes uncovered in this study, and examine whether such experiences translate into increased civic engagement, volunteerism, or public service careers in the coaches' postgraduate lives. Additionally, more attention should be directed to understanding whether sustained involvement over multiple years leads to more stable and long-lasting outcomes. Finally, future research should consider more rigorous approaches to understanding the causal impact of the TNT program, such as randomized, controlled experiments that utilize longitudinal designs.

Conclusion

As more postsecondary institutions recognize the importance of anchoring their institutions within their surrounding communities and building reciprocal partnerships that advance institutional and local concerns (*Dubb et al., 2013*), the TNT program provides an important exemplar in promoting a socially responsible institution. The TNT program also underscores that learning about social justice and developing civic-minded graduates can be achieved through structured, domestic off-campus opportunities (*Sobania*, 2015). When these programs incorporate opportunities to interact across difference coupled with reflective methods to process one's experiences, they offer tremendous potential to increase students' understanding of contemporary social justice issues while simultaneously developing their future commitments, especially in working with communities facing pressing social concerns (*Jones & Abes, 2004*).

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The Role of Civic Literacy and Social Empathy on Rates of Civic Engagement Among University Students

Mary E. Hylton

Abstract

Civic engagement is pivotal to the health of communities. Through engagement in civic activities, people from diverse backgrounds come together to address community problems. Recent studies report declining rates of civic engagement among Americans. In particular, young Americans engage less frequently in activities central to democracy, such as voting and influencing legislation. This article examines the relationships between civic engagement, civic literacy, and social empathy among students enrolled at a public university in the western United States. Findings from this study indicate that increased civic literacy and social empathy correlate to higher rates of civic engagement among university students.

Keywords: Civic engagement, community engagement, civic literacy, social empathy

Introduction

mericans have a long tradition of political participation and civic involvement. Skocpol (1997) argued that the freedom to associate politically, which is inherent to American democracy, extended beyond politics to many other civic matters, resulting in a rich and multifaceted history of civic engagement. From the voluntary associations described by Tocqueville to the participatory politics of the early nation, American democracy has depended on people coming together to solve problems of community living. Civic engagement, then and today, involves collective action to address problems or to promote specific interests within communities. Ehrlich (2000) describes civic engagement as efforts "to make a difference in the civic life of our community through both political and non-political processes" (p. vi).

Much has been written about the decline of civic engagement among Americans. Americans today vote less frequently and in smaller numbers than did past generations (*File*, 2013). They are less likely to belong to community organizations, to attend community meetings (*Levine & Liu*, 2015), or to contact public officials (*AACU*, 2012). In particular, the engagement of young adults, those 18 to 29 years of age, in civic matters has declined over the past four decades (*AACU*, 2012). Young people today are less likely to vote than were past generations at the same age (*File*, 2013). The decline in civic engagement among young adults is an important consideration, given the significant role these young people will have in shaping the future of American democracy. It also necessitates exploration of what encourages civic engagement among young Americans.

Understanding the basic processes and functions of government encourages more involvement in democratic processes (ISI, 2011). Unfortunately, this understanding of government, or civic literacy, has also declined over the last two to three decades (AACU, 2012). Whereas civic literacy provides the knowledge that might enable people to be active within their communities, another concept, social empathy, could provide the motivation for involvement. Social empathy refers to the ability to understand the life experiences of others within a context of social inequities and disparities (Segal, 2011). It also involves a sense of social responsibility (Segal, Wagaman, & Gerdes, 2012). To date, no published studies have explicitly examined the effect of social empathy on civic engagement. This study examined the relationship between social empathy, civic literacy, and civic engagement among students enrolled in a medium-sized public university in the western United States. Specifically, this study sought to explore the effect of social empathy and civic literacy on different forms of civic engagement.

Literature Review

Civic Engagement

Civic engagement includes a variety of activities falling into three not necessarily exclusive categories: (1) civic activities, (2) political voice activities, and (3) electoral activities (*Keeter, Zukin, Andolina, & Jenkins, 2002*). Civic activities focus on voluntary associations that promote the health and wellbeing of a community. These activities include membership in fraternal organizations, religious organizations, clubs, or professional associations as well as volunteering, charitable fundraising, and community problemsolving. Political voice and electoral activities emphasize the role of citizenship in American democracy. Political voice activities involve efforts to shape social institutions through collective action. Examples of political voice activities include boycotting companies, signing petitions, protesting, expressing opinions to media sources, and lobbying efforts such as writing letters or e-mails, testifying, and visits with policymakers. Finally, electoral activities include all those activities aimed at influencing the outcomes of the American electoral process, such as voting, campaigning, and registering other people to vote.

For democracy to function as such, community members must be engaged in civic matters (*AACU*, 2012). Moreover, they must engage in all three categories of activities: civic, political voice, and electoral. Through collective action, people from different backgrounds, who might not normally associate with one another, come together for a common purpose. As a result, civic engagement promotes an understanding of the connection between individual selfinterest and the common good. Additionally, political voice and electoral activities help to hold decision makers accountable to the needs and interests of citizens.

Not only is civic engagement pivotal to democracy, it also correlates to positive community and individual outcomes. In a 2011 report, the National Conference on Citizenship (NCoC) reported that "civic health matters for economic resilience" (p. 6). The NCoC study found that communities with higher rates of civic engagement recovered faster economically after the recession. At the individual level, civic engagement can help develop habits and social networks that make people more employable. Furthermore, volunteering results in increased voting and feelings of empowerment as citizens (Greenblatt, 2012). NonProfit Votes (n.d.) reported that voters experience increased social connections, increased personal agency, and, perhaps as a result, better health and mental health outcomes. Political activism, in particular, correlates to higher reported life satisfaction, less stress, and greater overall wellbeing (Klar and Kasser, 2009; Sanders, 2001). Civic engagement plays a particularly important role in the experiences of college and university students. Civically engaged students have higher rates of satisfaction with college, higher GPAs, and higher retention rates; they are also more likely to complete degrees than are their less engaged peers (AACU, 2012).

Despite the numerous benefits, rates of civic engagement within the United States have continued to plummet. During his recent keynote address at the Campus Compact 30th Anniversary Conference, Robert Putnam derided the shrinking sense of community responsibility and civic belongingness among Americans in what he referred to as "a shriveled sense of we" (*Putnam, 2016*). Although rates of volunteerism have increased (largely as a result of initiatives to promote youth volunteerism), other forms of civic engagement have declined over the last 50 years. Levine and Liu (2015) reported, "The proportions of Americans who say that they have attended community meetings, worked with neighbors to address problems, and belonged to organizations have fallen between 1975 and 2005" (*p. 3*).

In particular, engagement in political voice and electoral activities has fallen. In a seminal report on civic engagement published more than a decade ago, young Americans were less likely to contact an elected official (34%) than they were to engage in community service (61%) or fundraising activities (51%) (Portney & O'Leary, 2007). Only 23% engaged in political campaigning or attended any public policymaking meetings. This reluctance to become involved in the democratic process is evident in patterns of voting. Arguably one of the most basic civic duties in which citizens can engage, voting has steadily declined since the 1960s. During the 2014 interim election, only 41.9% of eligible Americans voted (U.S. Census Bureau, 2015). In particular, voting among younger generations, which typically post high rates of voting, has declined nearly 12% over the past five decades (File, 2013). Although voter turnout among university and college students has historically been higher than voter turnout among the general population, this difference has leveled out in recent elections. According to a national study of college student voting, turnout among college and university students in most elections is 42% nationally (Thomas & Benenson, 2016). Most recently, the Center for Information and Research on Civic Learning and Engagement (CIRCLE, 2016) estimated that 50% of citizens age 18 to 24 voted in the 2016 presidential election. The decline in voting among young adults could relate to a lack of confidence in the effectiveness of voting in addressing social issues. Kiesa et al. (2007) reported that young adults view voting as minimally effective in promoting change.

Researchers have sought answers to the question "What factors lead to greater civic engagement among Americans?" Caputo (2010) found that education, income, and marital status correlated with higher civic engagement. Presence of children in the home and possession of college degrees correlated to nonactivist forms of civic engagement. Similarly, Andolina, Jenkins, Zukin, and Keeter (2003) found that youth whose parents volunteered were more likely to be civically engaged themselves. Although these findings provide some prospects for encouraging civic engagement, they fail to adequately spur political voice or electoral activities. Levine and Liu (2015) concluded that we have been successful in building an infrastructure of volunteer service but have failed to adequately address the other forms of civic engagement. We have thus neglected forms of engagement that aid in developing our ability to engage in difficult discussions, problem solving, and collaboration—that is, our ability to create and sustain healthy democratic communities.

Civic Literacy

Just as levels of civic engagement have decreased over the last three decades (*Levine & Liu*, 2015), levels of civic literacy among U.S. citizens have also decreased. The lack of understanding of the most basic of governmental functions and processes has been widely publicized ("Americans' Grasp on Civic Knowledge," 2014; Granderson, 2013). A recent Annenberg Public Policy Center study (APPC, 2014) found that only 36% of U.S. adults could name all three branches of the federal government. Similarly, a Pew study (*Pew Research Center, 2012*) found that less than half of Americans could identify which political party held the majority in the U.S. House of Representatives, and CIRCLE (2013) reported that only 53% of their sample could identify the political party that represents a more conservative ideology.

Young Americans also evidence low levels of civic knowledge. In 2010, less than 24% of high school seniors scored in the proficient or advanced range of the National Assessment of Educational Progress's civics exam (*NCES*, 2011). College and university students fare little better. The AACU (2012) reported that the average score on a civic literacy exam among 14,000 college seniors fell within the failing range. Similarly, ISI (2011) reported that among the 28,000 college students they surveyed, the average civic literacy score was 54%, or failing. Young Americans appear to have little understanding of how government functions, the complexities of the political process, or political ideology (*APPC*, 2014).

The lack of understanding of the basic functions and processes of American government raises the question, what does it mean to be civically literate? Although there is disagreement as to what civic literacy entails, most researchers agree that it includes "a basic understanding of the structure and functioning of government as well as the political process through which decisions are shaped" *(Hylton, 2015, p. 296)*. It also includes an understanding of the values that form the foundation of the U.S. Constitution, such as liberty, freedom, and justice.

Preparedness for engaged citizenship requires a civically literate populace. For example, civic literacy has frequently been cited as an important influence on civic engagement. ISI (2011) found that greater civic knowledge was the leading factor increasing rates of political engagement among Americans. When looking at specific indicators of civic engagement, CIRCLE (2013) found that young people with lower levels of political knowledge voted less than their more informed peers. The belief in the importance of civic knowledge to exercising citizenship can also be seen in the requirement that people applying for U.S. citizenship must pass a civics exam (10 randomly selected questions about the U.S. government) as part of the U.S. Naturalization Exam. Unfortunately, as further evidence of the lack of civic literacy among Americans, one in three native-born U.S. citizens can't pass the civics questions on the Naturalization Exam (*"Americans' Grasp on Civic Knowledge,"* 2014).

Social Empathy

Social empathy provides a conceptual means by which to understand how people recognize social injustice as well as their role in relation to these injustices. Social empathy couples interpersonal empathy with an understanding of contextual factors and a sense of social responsibility (Segal et al., 2012). Segal (2011) defines social empathy as "the ability to understand people by perceiving or experiencing their life situations and as a result gain insight into structural inequalities and disparities" (p. 267). An understanding of historical and contemporary structural inequities and oppression are inherent to this ability. Segal et al. (2012) refer to the ability to understand these structural inequities without having experienced them firsthand as macro-perspective-taking. Such macroperspective-taking enables people to transcend their own position within the social structure to better understand and empathize with groups in differing positions, including people in lower socioeconomic classes or people of different races, ethnicities, religions, gender identities, national origins, and sexual orientations.

Segal, Gerdes, Mullins, Wagaman, and Androff (2011) postulate that social empathy "fosters people's involvement in social change processes and increases civic engagement" (p. 442). Social empathy as a foundation of civic or democratic decision-making would, theoretically, lead to choices and solutions based on the wellbeing of all rather than being guided by self-interest. In discussing the potential of social empathy to influence democratic decision-making, Segal (2011) stated, If we operate on a foundation of social empathy, of truly identifying cognitively and emotionally with others to fully comprehend their situation, and then act on that understanding, we can only create a more just society with fewer social and economic disparities. (*p. 273*)

She concluded that social empathy and civic engagement work together in a dynamic process, each encouraging the development of the other.

Although prior research has found a connection between empathy and the ability to transcend self-interest (Hoffman, 2000), arguably the focus has been on interpersonal empathy and not social empathy. Interpersonal empathy refers to the ability to identify and understand the emotions of other people with whom we interact. Social empathy has only recently been conceptually defined and recognized as a distinct form of empathy. As only one component of social empathy, interpersonal empathy may not, on its own, encourage civic thinking. Segal (2011) warned that interpersonal empathy lacks the contextual understanding inherent to macro-perspective-taking and can lead to "flawed" understandings of large-scale structural issues, such as poverty or racism. Segal (2011) argued that interpersonal empathy thus "is insufficient to motivate a society or community toward social justice" (p. 268). In contrast, social empathy, with its concordant contextual understanding and sense of social responsibility, may increase people's willingness to engage in civic endeavors.

Methods

This study employed a web-based survey to examine the rates of civic engagement, civic literacy, and social empathy among a sample of undergraduate and graduate students enrolled in a medium-sized public university in the western United States. The study was declared exempt from Institutional Review Board review due to the lack of identifying information from participants. The question guiding this study was "Do social empathy and civic literacy influence rates of civic engagement?" It was hypothesized that civic engagement would increase with increased civic literacy or increased social empathy. In particular, it was hypothesized that two of the three civic engagement subscales, political voice and electoral activities, would be positively correlated to civic literacy. By contrast it was hypothesized that social empathy would be positively related to the third subscale, civic activities.

The web-based survey included the Civic Engagement Quiz (CIRCLE, n.d.), the Social Empathy Index, 20 civic literacy questions, and demographic questions. Developed by the Center for Information and Research on Civic Learning and Engagement, the Civic Engagement Quiz is a 26-item measure of civic engagement. The instrument uses indicators outlined by Keeter et al. (2002) and includes three subscales reflecting different dimensions of civic engagement: civic activities, electoral activities, and political voice. Respondents indicated their involvement in civic engagement activities by answering yes or no for each item. The Social Empathy Index (SEI) is a 40-item measure of social and interpersonal empathy developed by Segal et al. (2012). The SEI consists of two domains: interpersonal empathy and social empathy/contextual understanding. The instrument uses a 6-point Likert-type scale on which respondents indicate their level of agreement with statements indicative of empathy. Total scores for both subscales as well as the full SEI were calculated, with higher scores indicating higher levels of empathy.

The civic literacy measure included 15 questions from the National Assessment of Educational Progress's Questions Tool compiled by the US Department of Education (2014) and five questions addressing current national political leadership as well as state congressional representation. The questions from the Civic Assessment Database focused on principles of American democracy and constitutional issues. All of the questions were multiple choice. Scores on the civic literacy measure were calculated by adding the number of correct answers provided by individual respondents.

From a spreadsheet of all students enrolled at the university during the spring 2014 semester, 3,000 undergraduate students and 500 graduate students were randomly selected for participation. Via a SurveyMonkey e-mail, these students were sent an invitation to participate in the study and a link to the survey. Three follow-up e-mails were sent during the course of the semester. A total of 583 students started the survey, of which 168 had missing data and were excluded from the analysis. Exclusion of incomplete surveys left 415 completed surveys that were analyzed, resulting in a response rate of 11.8%.

Results

The overwhelming majority of respondents identified as female (71%), 28% identified as male, and 1% identified as transgender.

Eighteen percent of respondents reported being in graduate programs, 28% identified as juniors, 30% identified as seniors, and the remaining 24% were nearly equally split between freshmen and sophomores. Over 84% of respondents reported being full-time students, and 73% of respondents worked either full or part time. Twenty-six percent of the sample were pursuing degrees in social work, and 31% reported pursuing degrees in health science fields, including nursing, medicine, speech pathology, public health, and allied fields. Nineteen percent were pursuing degrees in the hard sciences or in engineering, 11% were pursuing degrees in the liberal arts, 6% in education, 6% in counseling or psychology, and 1% were pursing degrees in other fields.

Rates and Types of Engagement

Participants in this study reported involvement in an average of 10 civic engagement activities over the course of their lives. Notably, all students reported engaging in some form of civic engagement activity, with nearly all respondents (99%) reporting engagement in three or more activities. As in previous studies, students reported higher rates of engagement in civic activities versus political voice or electoral activities. Students engaged in an average of five civic activities compared to an average of 3.7 political voice activities and one electoral activity (see Table 1).

Engagement in activities categorized as "civic" ranged from 95% (community service volunteering) to 31% (environmental work) of the sample. The most commonly reported civic activity in which students engaged was unpaid volunteer work. Students in this sample reported high rates of involvement in charitable fundraising and volunteer work for youth, children, or education. They reported far less involvement in environmental organizations. Engagement in political voice activities ranged from 72% of the sample (boycotting companies) to just 6% (contacting broadcast media). By far, the most frequent political voice activities in which students engaged involved exercising opinion in a fashion that minimized both time requirements and possibilities for confrontation or disagreement, such as boycotting or supporting companies and signing petitions. Students were far less likely to report involvement in activities that involved higher time commitments or more risk of disagreement or confrontation, such as expressing their opinions to either print or broadcast media or having served as a canvasser. Students reported low rates of engagement in electoral activities, ranging from 36% of the sample who always voted to 14% of the sample who had given money to a campaign. Only 16% of

Table 1. Percentage of Engagement by Activity

	0/	
	%	
Civic Activities		
Have you volunteered or done any voluntary community services for no pay?		
Have you volunteered for an organization for youth, children or education?		
Besides donating money, have you ever done anything else to help raise money for a charitable cause?		
Have you ever worked together with someone or some group to solve a problem in the community where you live?		
Have you personally walked, ran or bicycled for a charitable cause?		
Have you volunteered with a civic or community organization involved in health or social services?		
Do you currently belong to any voluntary groups, clubs or associations?		
Have you volunteered with a religious group?		
Have you volunteered with an environmental organization?	31	
Political Voice		
Have you ever NOT bought something from a certain company because you disagree with the social or political values of the company that produces it?		
Have you bought something because you have liked the social or political values of the company that produces or provides it?		
Have you ever signed an email petition about a social or political issue?		
Have you ever signed a written petition about a political or social issue?		
Have you ever contacted or visited a public official at any level of government to express your opinion?		
Have you ever taken part in a protest, march or demonstration?		
Have you contacted a newspaper or magazine to express your opinion?	16	
Have you worked as a canvasser going door to door for a political or social group or candidate?		
Have you contacted broadcast media to express your opinion?	6	
Electoral Activities		
We know that most people don't vote in all elections. Do you vote in both national and local elections? ^a		
Have you volunteered for a political organization or candidate running for office?		
When there is an election taking place, do you try to convince people to vote for or against one of the parties or candidates, or not?		
Do you wear a campaign button, put a sticker on your car, or place a sign in front of your house?		
Have you ever given money to a candidate, political party, or organization that supported candidates?	14	

Note. N = 415.All percentages have been rounded.

^a Participants were able to select "always," "usually," or "never" in response to this question. Only the "always" answers were used to calculate the percentage reported in this row to indicate regular voting. students reported attempting to influence the votes of other people, and only 15% reported expressing their preference for candidates via buttons, stickers, or yard signs. Interestingly, 17% of students reported having never voted. All respondents were over the age of 18; however, it is possible that some students had not yet had the opportunity to vote in an election after turning 18. Furthermore, many respondents would have had fewer opportunities to vote or contribute to campaigns than they would have had to participate in other forms of civic engagement due to their age.

Civic Literacy Scores

Students in this sample scored relatively well on the civic literacy questions. The average score on the civic literacy questions was 15.5 out of 20, or the equivalent of a C+. A slight majority of students (55.9%) scored in the A or B range, and 12.8% scored in the failing range (see Table 2). The question most often answered correctly asked students to identify the three branches of government, which 96% of students answered correctly. The question most often answered incorrectly asked students which branch of the federal government has the power to tax: 36% of the students answered this question incorrectly. Seven of the 20 questions were incorrectly answered by more than a quarter of the students (see Table 3). Three of the four questions about current political leadership were among these seven questions. Thirty-six percent of the students could not identify the current Speaker of the U.S. House of Representatives, and 34% could not identity the party holding the majority of members in the House.

Grade	n	%
A (100%–90%)	155	37.3
B (89%– 80%)	77	18.6
C (79%–70%)	73	17.6
D (69%- 60%)	57	13.7
F (59% and below)	53	12.8

Table 2. Percentage of Students Scoring in Each Grade Range

Note. N = 415.

	% Incorrect
Who is the current Speaker of the United States House of Representatives? ^a	36
Under the United States Constitution, the power to tax belongs to the?	36
Which party holds the majority of members in the United States House of Representatives? ^a	34
Which of the following activities is an example of cooperation between state and national governments?	27
The number of electoral votes each state is allotted is based on the state's?	28
Which party holds the majority in the United States Senate? ^a	25
In a democratic political system, which of the following ought to govern the country?	25

Table 3. Questions Most Often Answered Incorrectly

Note. N = 415.All percentages have been rounded.

^a Items reflecting knowledge of current political leadership

Social Empathy Scores

Scores on the Social Empathy Index (SEI) ranged significantly across the sample, with the lowest score being 114 and the highest being 238. The average score on the full SEI was 182. Scores on the SEI subscales of interpersonal empathy and social empathy/contextual understanding were similarly varied. Scores on the interpersonal empathy subscale ranged from 38 to 132, with the average score falling at 100. Scores on the social empathy/contextual understanding subscale ranged from a low of 7 to a high of 108, with the average falling at 82.

Hypothesis Testing

The first hypothesis guiding this study predicted that civic engagement would be positively correlated with civic literacy and social empathy scores. A simple linear regression was calculated to test this hypothesis. A significant regression equation was found (F(2,408) = 17.681, p = .000, with an R^2 of .075). The analysis shows that rates of civic engagement increased when levels of civic literacy ($\beta = .221$, p < .05) and social empathy ($\beta = .025$, p < .05) also increased.

To examine the subsequent study hypotheses, separate Pearson's correlations were run between each of the civic engagement subscales and the two independent variables, civic literacy and social empathy. There were weak but significant relationships between civic literacy and political voice activities (r = .250, n =

415, p = .000) and electoral activities (r = .236, n = 415, p = .000). No significant relationship was found between civic literacy and civic activities (r = .016, n = 415, p = .016). There were also significant relationships between social empathy as measured by the full SEI and two of the civic engagement subscales. Although significant, the relationship between social empathy and political voice activities was weak (r = .183, n = 415, p = .000), as was the relationship between social empathy and civic activities (r = .161, n = 415, p = .001). No significant relationship between social empathy and electoral activities was found (r = .087, n = 415, p = .078).

A one-way ANOVA was run to determine whether or not academic major influenced rates of civic engagement. There was a statistically significant difference between students based on major (F(9,387) = 2.142, p = .025). Students majoring in social science disciplines, including sociology, anthropology, political science, economics, and philosophy, had the highest levels of civic engagement (m = 12.4), and students majoring in social work reported the second-highest rates of civic engagement (m = 11.2). A Tukey posthoc test revealed that students in social science majors reported significantly higher levels of civic engagement than did students majoring in nursing (p = .034), psychology and counseling (p =.025), public health and pre-med programs (p = .021), engineering (p = .009), hard sciences (p = .002), and the liberal arts (p = .002). There were no statistically significant differences between students majoring in social sciences disciplines and those majoring in social work (p = .175), education (p = .199), or general studies (p = .300). Furthermore, students majoring in social work reported significantly higher civic engagement rates than did students majoring in the liberal arts (p = .012) or the hard sciences (p = .014).

Discussion

The civic engagement of students enrolled in this large public university in the western United States mirrored patterns of engagement evidenced in prior studies (*Finley, 2012; Portney & O'Leary, 2007*). These students were far more likely to have engaged in short-term volunteering than they were either to have engaged directly with the democratic process. The most frequently reported activities involved a limited time commitment, such as community service volunteering, fundraising events, boycotting or supporting companies, or signing petitions. Respondents were less likely to have participated in civic activities that required a sustained time commitment, such as belonging to clubs or community organizations. Students were also less likely to have engaged in activities directly related to political processes, such as political campaigning, voicing support of candidates, attempting to influence the votes of others, lobbying policymakers in person, or participating in a march or protest. This finding is supported by prior research that indicates that young adults are dissatisfied with formal politics and are therefore less inclined to be involved in these activities (*Kiesa et al., 2007*). Importantly, the political voice and electoral activities in which students reported the least amount of involvement also often involved the potential for higher levels of conflict. For example, influencing the votes of others and testifying can involve persuading people who might hold differing positions.

As predicted, higher levels of both civic literacy and social empathy correlated to increased rates of civic engagement. More specifically, civic literacy appeared to encourage more involvement in electoral and political voice activities, and social empathy appeared to encourage more involvement in civic and political voice activities. These findings are important for efforts to encourage young adults to commit more fully to their communities through civic engagement activities. Educators who want to encourage young adults in the United States to engage either in the electoral process or in influencing policy may need to also focus on increasing opportunities for these young people to become civically literate. For example, three of the four questions that asked about current political leadership were answered incorrectly by over a quarter of participants. It shouldn't be surprising, therefore, that only 34% of these students reported "always voting." The connection between civic literacy and electoral and political voice engagement is particularly concerning given the low rates of civic literacy found in national studies (AACU, 2012). Expecting students to vote, campaign, register other people to vote, attempt to influence the votes of others, or lobby policymakers without ensuring that these students have a solid understanding of processes, functions, and laws governing these activities may be unrealistic.

Fortunately, research sponsored by the Campaign for the Civic Mission of Schools indicates that civic engagement opportunities also build civic competence, including civic knowledge (Gould, Jamieson, Levine, McConnell, & Smith, 2011). In other words, civic literacy and civic engagement may have a mutually beneficial relationship. In addition, engagement in political voice and electoral activities specifically may also build civic literacy. Educators can begin to add opportunities for learning about governmental and political processes into civic engagement activities. Simply ensuring that there are opportunities for students to engage in conversations about elections, and to explore candidates and election issues, has been shown to result in higher rates of voting among university students (*Thomas & Benenson, 2016*). Numerous types of civic engagement activities can offer college and university students opportunities to build civic literacy. For example, students can (1) coordinate candidate forums on campus and in the community, (2) coordinate and host mock elections and mock debates, (3) organize debate-watching parties, (4) engage in voter registration drives, (5) organize lobbying training on campus and in the community, and (6) engage in service-learning in community advocacy organizations.

As stated previously, increased social empathy also is correlated with increased civic engagement, particularly in civic and political voice activities. Based on these findings, the ability to recognize structural inequities and empathize with those groups subject to them appears to encourage university students to address such inequities through civic engagement. The increased engagement could reflect students' attempts to address these inequities via civic activities such as fundraising or issue-specific volunteering and political voice activities such as boycotting and petition signing. Therefore, educators may be able to encourage civic engagement by providing learning opportunities that facilitate the development of social empathy. Providing opportunities for students to learn about social structure, social institutions, social problems, structural oppression, privilege, power, and diversity can help them better understand social injustice and economic inequality. This understanding may help facilitate the development of empathy for people who suffer from economic inequality and social injustice. Furthermore, similar to the mutually reinforcing relationship between civic literacy and civic engagement, social empathy and civic and political voice activities might also work reciprocally. Engagement in civic and political voice activities that highlight social injustice and economic inequality may also strengthen the development of social empathy.

The higher rates of civic engagement among social science majors and, to a slightly lesser extent, social work students, may reflect various aspects of their academic programs, including more opportunities or even expectations for involvement in their communities; greater availability or requirements of service-learning within said majors; greater understanding of societal institutions, which leads to greater engagement; or simply greater interest in civic matters. It is not possible to ascertain why students in some majors were significantly more engaged with their communities than students in other majors.

A significant limitation of this study is its lack of generalizability to other universities or colleges and beyond to young adults not enrolled in college. To better understand the relationships between civic literacy, social empathy, and civic engagement a broader sample of young adults from geographically diverse locales and educationally diverse backgrounds is needed. However, the findings of this exploratory study raise important possible directions of research for educators and organizers interested in increasing civic engagement. Future studies should investigate the direct relationship between civic literacy, social empathy, and civic engagement among a broader segment of the U.S. population. For example, how do civic literacy and social empathy interact to affect the engagement of young adults who aren't enrolled in college? Additionally, what types of activities encourage development of both civic literacy and civic engagement? As they may with civic literacy, researchers can begin to look for best practices in terms of integrating social empathy development into civic engagement efforts. For example, future studies could use a pretest-posttest design to examine how educational units on social empathy affect rates of civic engagement. Given the relatively recent conceptualization of social empathy as a specific theoretical construct, future studies could also look at the types of knowledge and experiences that build this form of empathy.

Conclusion

To ensure that justice and freedom exist in balance for all members of society, Americans must be engaged in their communities and interested in the wellbeing of their fellow residents. To do so, they must be informed about the issues within their communities, empathize with those challenged by an unjust social structure (social empathy), and understand enough about the democratic process (civic literacy) to be able to engage in change efforts with their fellow community members. They must be willing to take on controversial issues and wade into conflict on behalf of their communities when issues threaten common values of democracy. This study illustrates that civic literacy and social empathy together may play a role in increasing civic engagement.

Young adults are reportedly ambivalent about formal politics, due in part to the polarized and confrontational nature of recent political discourse (*Kiesa et al.*, 2007). Although it is encouraging to see university students engaged in volunteering and fundraising activities, this pattern of engagement may reflect young adults' frustrations with the recent political climate as well as the limitations of current civic engagement efforts. The responsibilities and dispositions of citizenship or (for those who are not citizens) community membership are not time limited or conflict free. Arguably, true engagement in community requires a sustained interest in, attention to, and willingness to be involved with community efforts. It also requires a willingness to "fight," or to engage conflict, in order to do what is best for the community. Although volunteering and participating in fundraising activities might raise awareness of specific issues faced by segments of the community, these activities do not always engender a larger sense of community belongingness or responsibility, or prepare young adults to take on the difficult problems of democracy. Fortunately, according to a recent survey of incoming college freshmen, young adults are willing to engage conflict through protest and activism (Eagan et al., 2015). Educators can build on these inclinations by providing knowledge and training for effective engagement in political voice and electoral activities as well as cultivating opportunities for students to engage in sustained community involvement.

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Assessing Community Health Priorities and Perceptions About Health Research: A Foundation for a Community-Engaged Research Program

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Abstract

We performed this study to better understand communities' health priorities and willingness to participate in research in order to reduce health disparities. To include communities whose members often experience health disparities and may lack opportunities to participate in research, student interns from multiple disciplines administered the Sentinel Network's 33-item survey in nontraditional locations. The survey was completed by 3,151 respondents. The five most frequently identified health concerns were diabetes, cancer, hypertension, heart problems, and weight. Concerns varied by race/ethnicity. In general, respondents across all races/ethnicities-especially Pacific Islanders—expressed willingness to participate in research. The study demonstrates the effectiveness of this method for identifying health priorities and willingness to participate in research. The results illustrate minority communities' willingness to participate in research if provided the opportunity. Insights gained from this study are informing current and planned communityengaged research to reduce health disparities among minority communities.

Keywords: Community-based participatory research, community-engaged research, health disparities, minority health, service-learning

Introduction

Ithough advances in medicine have extended the length and quality of life for many, not all have benefited equally. Minority populations experience health disparities in morbidity and mortality across the life course (*CDC*, 2013). Minority populations are often underrepresented in health research, and increased participation is cited as one way to help address health disparities (*Aungst, Haas, Ommaya, & Green, 2003; Cottler et al., 2013; Ford et al., 2005; Minkler & Wallerstein, 2008; UyBico, Pavel, & Gross, 2007; Wendler et al., 2006; Yancey, Ortega, & Kumanyika, 2006*).

As part of an effort to increase minority populations' role in health research, five Clinical Translational Science Award (CTSA) sites formed the Sentinel Network in 2008. Partner universities included Washington University, University of California-Davis, University of Michigan, University of Rochester, and Einstein College of Medicine. Two community organizations, Community-Campus Partnerships for Health and Patient Advocates in Research, are also part of the Sentinel Network. The University of Florida joined the network in 2012. The objective of the Sentinel Network is to collaborate across CTSA sites to develop strategies for addressing health disparities through community-engaged approaches. One of the Sentinel Network's first projects was to establish a sustainable network that encourages ongoing, real-time assessment of top health concerns and willingness to participate in research (Cottler et al., 2013). In 2009, each of the original five universities was awarded funds for one Community Health Worker (CHW) through the American Reinvestment and Recovery Act supplemental grant, and additional resources were leveraged through local CTSA sites' community engagement (CE) programs to conduct the Sentinel Network Survey. In total, 5,979 surveys were conducted across the five sites (Cottler et al., 2013).

Facilitated by the University of Arkansas for Medical Sciences (UAMS) Translational Research Institute, UAMS has focused community-engaged research efforts on reducing health disparities in the African American, Hispanic/Latino, and Pacific Islander communities. These three communities experience significant health disparities nationally and in Arkansas. For example, all three communities have higher rates of Type 2 diabetes, hypertension, and certain types of cancers (*Blackwell, Lucas, & Clarke, 2014; McElfish, Rowland, et al., 2016; Phillips, Quick, & Goodell, 2013; Schiller, Lucas, & Peregoy, 2012*).

UAMS joined the Sentinel Network in 2012 and administered the Sentinel Network Survey at its Northwest Arkansas Campus in 2013 and at its Central Arkansas campus in 2014. The aim of the dual-site project was to gain an understanding of the communities' health priorities and of their willingness to participate in research, with the goal of using this information to guide communityengaged research to reduce health disparities in these communities. Gathering broad community input is a common first step in engaging the community in community-engaged research (*Hardy*, *Bohan*, & *Trotter*, 2013). The goal of this survey was to gather input from the community to inform subsequent community-engaged research. The survey was paired with other engagement efforts and qualitative interviews that are described elsewhere (*McElfish*, *Goulden*, *et al.*, 2017; *McElfish*, *Kohler*, *et al.*, 2015).

Methods

Survey

The survey was conducted for 14 months in Northwest Arkansas and 9 months in Central Arkansas. Drawing on initial Sentinel Network methodology, this study used the same core survey from the initial 2009 Sentinel Network project (*Cottler et al., 2013*). The core survey consisted of 33 items and took approximately 5 minutes to complete. Items included age, zip code, race, level of education, diagnosis of common health problems, insurance, smoking, experience with research, willingness to participate in research, and recommended compensation levels for research participation. No identifying information was collected other than the respondent's zip code. To increase access, the survey was translated into Spanish, Marshallese (the primary language of the Pacific Islander community in Northwest Arkansas), and Hmong (the primary language of the Asian community in Northwest Arkansas). Survey respondents were not compensated for their participation.

Recruitment

Nontraditional locations were targeted for respondent recruitment and survey administration, with the goal of including communities whose members often experience health disparities and may not otherwise have the opportunity to participate in research. These locations included community centers; food banks; federally qualified health centers; local community health clinics for the uninsured; grocery stores in low-income neighborhoods; laundromats; libraries; parks; and Women, Infants, and Children (WIC) clinics. Potential respondents were approached at these locations and asked to participate in a short community health survey. Respondents provided verbal consent prior to participation.

Data Collection and Data Collector Training

Under the supervision of the principal investigators, university student interns performed all data collection. Twenty-eight student interns (16 in Central Arkansas and 12 in Northwest Arkansas) were recruited from community health promotion, nursing, public health, and sociology degree programs. Students served 8 hours per week for 12 weeks as part of a research internship. Prior to data collection, all students completed training on the Health Insurance Portability and Accountability Act (HIPAA) and an 18-module social/behavioral research course through the Collaborative Institutional Training Initiative (CITI) program. Students also completed a 4-hour training session that addressed cultural awareness and sensitivity, Institutional Review Board (IRB) compliance, proper data entry, and data collection techniques, including building rapport, special situations (e.g., respondents with low literacy level, cognitive impairment, or difficulties with hearing or vision), and general interviewing skills. Students rehearsed and were tested on survey administration procedures prior to administering surveys in the field. A systematic quality assurance and control plan was used to identify data collection problems, and further training was provided as needed. Students from racially and ethnically diverse backgrounds-fluent in English, Spanish, Marshallese, and/or Hmong-were recruited. Bilingual students were strategically assigned to locations with a high number of community members that spoke each particular language. Students conducted the survey in teams of two. Surveys were either read aloud to respondents or self-administered, depending on respondents' preferences. Data were collected using paper and pencil instruments and then entered into an electronic data capture system.

Analytical Methods

Closed-ended items were analyzed by race/ethnicity. Means with standard deviations are presented for continuous variables. Binomial and proportional confidence intervals are presented for categorical variables.

Open-ended items asked respondents to list their "three top health concerns." Across all respondents, a total of 6,848 health concerns were listed. These open-ended responses were coded independently by two coders, who began by categorizing responses into categories based on the five most frequently mentioned concerns in Cottler et al.'s (2013) original research: hypertension, diabetes, cancer, weight, and heart problems. The coders then developed 22 emergent categories to capture the other most frequently mentioned concerns (e.g., insurance/cost/access, mental health, asthma/respiratory, bones, dental problems, arthritis, kidney concerns, etc.). Some health concerns directly implicated more than one category and were therefore included in more than one category. For example, the reported concern "arthritis and anxiety disorders" was assigned to the categories for arthritis and mental health. For any concerns to which the two coders assigned different categories, discrepancies were resolved through discussion. Using the 27 categories, the coders were able to categorize 84.7% of all concerns listed by respondents. The remaining 16.3% of codes were not mentioned by enough respondents to be included as separate themes. For example, aging, Ebola, water quality, and vaccinations were each mentioned as top health concerns by fewer than three respondents.

Results

Description of Respondents

The survey was completed by 3,151 respondents. Demographic characteristics of respondents are presented in Table 1. All percentages are based on the number of completed responses to the relevant item. Among respondents, 68.7% were female, 81.7% had received a high school diploma, and only 18.9% had completed a bachelor's degree. The average age was 37.5 years (SD = 14.5). With respect to race and ethnicity, respondents who described themselves as Hispanic/Latino were counted as Hispanic/Latino and not as part of any other race/ethnicity. In this way, 42.7% described themselves as White, 21.2% as Hispanic/Latino, 17.1% as Black/ African American, and 9.2% as Pacific Islander. A further 4.6% described themselves as belonging to multiple races/ethnicities. As shown in Table 1, respondents who self-identified as Asian (1.9%), American Indian (1.5%), Middle Eastern (0.3%), or "Other" (1.5%) also took part in the survey. However, because of the relatively low numbers of respondents in these groups, further results are not presented separately for these groups. For the five larger groups, Table 2 presents respondent demographic characteristics by selfreported race/ethnicity.

Demographic Characteristics	Number (%; 95% CI)
Race/Ethnicity	
Hispanic/Latino	653/3084 (21.2; 19.7, 22.6)
American Indian	48/3084 (1.5; 1.1, 2)
Asian	60/3084 (1.9; 1.5, 2.4)
Black/African American	527/3084 (17.1; 15.8, 18.4)
Middle Eastern	8/3084 (0.3; 0.1, 0.4)
Pacific Islander	284/3084 (9.2; 8.2, 10.2)
White	1316/3084 (42.7; 40.9, 44.4)
Biracial/Multiracial	141/3084 (4.6; 3.8, 5.3)
Other	47/3084 (1.5; 1.1, 2.0)
Sex	
Female	2014/2928 (68.8; 67.0, 70.4)
Male	914/2928 (31.2; 29.5, 32.9)
Education	
High school diploma	2458/3007 (81.7; 80.4, 83.1)
College degree	567/3007 (18.9; 17.5, 20.3)
Age (M ± SD)	37.5 ± 14.5

Table I. Demographic Characteristics of Survey Respondents

Note. CI = confidence interval. Means and percentages are based on the number of valid responses to each item. Respondents who described themselves as Hispanic/Latino were counted as Hispanic/Latino and not as part of any other race/ethnicity.

	Hispanic/Latino (<i>n</i> = 653)	Black/African American (n = 527)	Pacific Islander (<i>n</i> = 284)	White (<i>n</i> = 1316)	Biracial/Multiracial (n = 141)
Demographic Characteristic	Number (%; 95% CI)	Number (%; 95% Cl)	Number (%; 95% CI)	Number (%; 95% CI)	Number (%; 95% CI)
Sex					
Female	458/590	318/469	154/263	880/1268	85/136
	(77.6; 74.3, 80.1)	(67.8; 63.6, 72.0)	(58.6; 52.6, 64.5)	(69.4; 66.8, 71.9)	(62.5; 54.0, 70.2)
Male	132/590	151/469	109/263	388/1268	51/136
	(22.4; 19.0, 25.7)	(32.2; 28.0, 36.4)	(41.4; 35.5, 47.4)	(30.6; 28.0, 33.1)	(37.5; 29.1, 45.3)
Education					
High School Diploma	342/608	474/505	178/264	1178/1301	114/131
	(56.3; 52.3, 60.2)	(93.9; 92.0, 96.1)	(67.4; 61.8, 73.1)	(90.5; 89.0, 92.1)	(87.0; 81.3, 92.8)
College Degree	51/608	106/505	7/264	329/1301	20/131
	(8.4; 6.2, 10.6)	(21.0; 17.4, 24.5)	(2.7; 0.7, 4.6)	(25.3; 22.9, 27.7)	(15.3; 9.1, 21.4)
Age (M ± SD)	34.0 ± 11.1	35.7 ± 13.8	37.2 ± 12.2	40.3 ± 16.1	33.4 ± 13.7

Most Frequently Mentioned Health Concerns

The five most frequently mentioned concerns—diabetes, cancer, hypertension, heart problems, and weight—accounted for over half (52.0%) of all concerns mentioned, alone or in combination. These five concerns were also the five most frequently mentioned concerns of the original Sentinel Network Survey (*Cottler et al., 2013*), where they did not vary according to age or race/ ethnicity. However, as Table 3 indicates, the five most frequently mentioned concerns in the present study do vary as a function of race/ethnicity, with Pacific Islander and biracial/multiracial respondents noting concerns related to insurance/cost/access (26.8% of concerns mentioned by Pacific Islander respondents). Furthermore, Pacific Islanders were the only group to list kidney problems as a top health concern (11.2% of concerns mentioned by Pacific Islander respondents).

Table 3. To	p Five Health	Conc	cerns of Surve)	y Res	Table 3. Top Five Health Concerns of Survey Respondents, by Race/Ethnicity	ace/Et	thnicity					
	Total (n = 3151)		Hispanic/Latino (n = 653)	ou	Black/African American (n = 527)		Pacific Islander (n = 284)	er	White (n = 1316)		Biracial/ Multiracial (n = 141)	
Number of Concerns	6848		1331		430		295		854		128	
First	Diabetes	939	Diabetes	254	Hypertension 217		Diabetes	135	Cancer	377	Diabetes	42
Second	Cancer	865	Cancer	206	Diabetes	I74 Insu Co	Insurance/ Cost/Access	79	Heart Disease	343	Hypertension 42	42
Third	Hypertension	688	Hypertension 110		Cancer 15	150 Hy	Hypertension	62	Diabetes	279	Cancer	28
Fourth	Heart Disease	618	Heart Disease	95	Heart Disease 10	106 Car	Cancer	48	48 Weight	246	Heart Disease	23
Fifth	Weight	462	Weight	85	Weight 8	83 Kid	Kidney	33	Hypertension	205	Insurance/ Cost/Access	21
Note. Each re who described	sspondent could lis d themselves as H.	t uþ to isþanic,	three of their "top /Latino were count	healtl ed as	Note. Each respondent could list up to three of their "top health concerns." Some health concerns were coded as belonging who described themselves as Hispanic/Latino were counted as Hispanic/Latino and not as part of any other race/ethnicity	health cc d not as	oncerns were c part of any ot	oded (Note. Each respondent could list up to three of their "top health concerns." Some health concerns were coded as belonging to multiple categories. Respondents who described themselves as Hispanic/Latino were counted as Hispanic/Latino and not as part of any other race/ethnicity.	ole caté	egories. Responder	ıts

Survey Results

The survey also asked respondents to indicate whether they have ever been told by a health professional that they have arthritis, asthma, cancer, diabetes, depression, heart disease, high blood pressure, a kidney problem, or a disease of the muscles or bones. Table 4 presents responses to these items by race/ethnicity, along with responses to items assessing whether or not respondents have health insurance or have smoked in the past 30 days. For these items, the most prevalent health conditions differed as a function of race/ethnicity. From among the listed conditions, White respondents' and Hispanic/Latino respondents' most reported condition was depression (39.9% of White respondents and 16.5% of Hispanic/Latino respondents), Black/African American respondents' most reported condition was high blood pressure (36.3%), and Pacific Islander respondents' most reported condition was diabetes (28.2%).

The survey evaluated whether or not respondents had previously participated in health research, and it assessed respondents' willingness to participate in several types of health research studies, as well as their likelihood to take part in health research in general. For example, the survey asks respondents if they would participate in health research studies in which researchers only ask questions, in which researchers want to review respondents' health records, in which respondents have to take medicine, and so on. Table 5 presents responses to these items by race/ethnicity. Overall, 21.3% indicated that they would "definitely" take part in a health research study if they had the opportunity and 62% said they "may" participate if given the opportunity. However, only 10.8% reported having had the opportunity to participate, and only 8.5% of respondents reported having ever been in a health research study.

Compared to other race/ethnicity respondents, a relatively large proportion of Pacific Islander respondents reported having ever been in a health research study (19.4% vs. 8.5% of all respondents). In addition, 39.1% of Pacific Islander respondents indicated that they would "definitely" take part in a research study if they had the opportunity (compared to 21.3% of all respondents). Pacific Islander respondents were particularly likely to express willingness to participate in studies in which they might have to "take medicine" or "stay overnight in a hospital or clinic" (48.4% and 43.9% of Pacific Islander respondents vs. 28.2% and 32.3% of all respondents, respectively).

Table 4. Health Conditions, Insurance Status, and Smoking Behavior Reported by Survey Respondents, by Race/Ethnicity	ance Status, and S	Smoking Behavio	r Reported by Si	urvey Responde	nts, by Race/Eth	nicity
	Total (n = 3151)	Hispanic/Latino (n = 653)	Black/African American (n = 527)	Pacific Islander (n = 284)	White (n = 1316	Biracial/ Multiracial (n = 141)
Reported Characteristic	Number	Number	Number	Number	Number	Number
	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)
High blood pressure	850/3092	93/638	186/512 69/279	69/279	416/1298	23/138
	(27.5; 25.9, 29.1)	(14.6; 11.9, 17.6)	(36.3; 32.2, 40.7) (24.7; 19.8, 30.2)	(24.7; 19.8, 30.2)	(32; 29.5, 34.7)	(16.7; 10.9, 24)
Depression	860/3047	103/624	116/503	36/274	512/1284	31/136
	(28.2; 26.6, 29.9)	(16.5; 13.7, 19.7)	(23.1; 19.4, 27)	(13.1; 9.4, 17.7)	(39.9; 37.2, 42.6)	(22.8; 16, 30.8)
Heart disease	196/3018	10/617	30/503	23/273	104/1268	7/136
	(6.5; 5.6, 7.4)	(1.6; 0.8, 3)	(6;4.1,8.4)	(8.4; 5.4, 12.4)	(8.2; 6.8, 9.9)	(5.1; 2.1, 10.3)
Diabetes	427/3047	64/631	68/502	78/277	167/1276	15/137
	(14; 12.8, 15.3)	(10.1; 7.9, 12.8)	(13.5; 10.7, 16.9)	(28.2; 22.9, 33.9)	(13.1; 11.3, 15.1)	(10.9; 6.3, 17.4)
Cancer	199/3033	10/620	23/500	23/276	115/1279	6/137
	(6.6; 5.7, 7.5)	(1.6; 0.8, 2.9)	(4.6; 2.9, 6.8)	(8.3; 5.4, 12.2)	(9.0; 7.5, 10.7)	(4.4; 1.6, 9.3)
Arthritis	526/3057	44/628	80/506	32/274	308/1288	19/137
	(17.2; 15.9, 18.6)	(7.0; 5.1, 9.3)	(15.8; 12.7, 19.3)	(11.7; 8.1, 16.1)	(23.9; 21.6, 26.3)	(13.9; 8.6, 20.8)
Note.Table 4 continued on next page.						

Table 7. Incardi Conditions, insu and Coards, and Showing Scharton reported by Survey Respondence, by Racel Funnicy)				
	Total (n = 3151)	Hispanic/ Latino (n = 653)	Black/African American (n = 527)	Pacific Islander (n = 284)	White (n = 1316	Biracial/ Multiracial (n = 141)
Reported Characteristic	Number	Number	Number	Number	Number	Number
	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)
Muscle/bone diseases	208/3025	33/627	26/499	32/274	92/1270	7/134
	(6.9; 6.0, 7.8)	(5.3; 3.7, 7.3)	(5.2; 3.4, 7.5)	(11.7;8.1, 16.1)	(7.2; 5.9, 8.8)	(5.2; 2.1, 10.5)
Asthma	450/3028	47/625	108/501	25/272	211/1272	21/136
	(14.9; 13.6, 16.2)	(7.5; 5.6, 9.9)	(21.6; 18, 25.4)	(9.2; 6.0, 13.3)	(16.6; 14.6, 18.7)	(15.4; 9.8, 22.6)
Kidney Problem	187/3009	22/615	19/497	33/271	91/1271	6/135
	(6.2; 5.4, 7.1)	(3.6; 2.3, 5.4)	(3.8; 2.3, 5.9)	(12.2;8.5,16.7)	(7.2; 5.8, 8.7)	(4.4; 1.6, 9.4)
Has smoked cigarettes	795/3105	54/641	147/521	48/281	449/1299	41/141
in past 30 days	(25.6; 24.1, 27.2)	(8.4; 6.4, 10.8)	(28.2; 24.4, 32.3)	(17.1; 12.9, 22)	(34.6; 32, 37.2)	(29.1; 21.7, 37.3)
Has any type of health	1936/3086	254/637	381/516	94/275	944/1295	102/141
insurance	(62.7; 61.0, 64.4)	(39.9; 36, 43.8)	(73.8; 69.8, 77.6)	(34.2; 28.6, 40.1)	(72.9; 70.4, 75.3)	(72.3; 64.2, 79.5)
Note. CI = confidence interval. Means and percentages are based on the nu were counted as Hispanic/Latino and not as bart of any other race/ethnicity.	Means and percentages are based on the number of valid responses to each item. Respondents who described themselves as Hispanic/Latino to and not as bart of any other race/ethnicity.	e number of valid r licity.	esponses to each iten	1. Respondents who d	escribed themselv	es a

	Total (<i>n</i> = 3151)	Hispanic/ Latino (n = 653)	Black/African American (n = 527)	Pacific Islander (<i>n</i> = 284)	White (<i>n</i> = 1316)	Biracial/ Multiracial (n = 141)
Reported Characteristic	Number	Number	Number	Number	Number	Number
	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)
Has ever been in a health research	262/3084	27/634	59/520	54/279	82/1289	12/139
study	(8.5; 7.5, 9.5)	(4.3; 2.8, 6.1)	(11.3; 8.8, 14.4)	(19.4; 14.9, 24.5)	(6.4; 5.1, 7.8)	(8.6; 4.5, 14.6)
Has ever had opportunity to	332/3060	31/625	85/513	43/274	129/1289	16/138
participate in health research	(10.8; 9.8, 12)	(5.0; 3.4, 7)	(16.6; 13.5, 20.1)	(15.7; 11.6, 20.6)	(10.0; 8.4, 11.8)	(11.6; 6.8, 18.1)
Has signed up for a research	56/3051	5/622	14/514	12/274	8/1284	5/139
registry	(1.8; 1.4, 2.4)	(0.8; 0.3, 1.9)	(2.7; 1.5, 4.5)	(4.4; 2.3, 7.5)	(0.6; 0.3, 1.2)	(3.6; 1.2, 8.2)
Would participate in a study:						
If only asked questions	1805/3008	327/604	286/509	1 39/272	848/1274	83/134
	(60.0; 58.2, 61.8)	(54.1; 50.1, 58.2)	(56.2; 51.8, 60.6)	(51.1; 45, 57.2)	(66.6; 63.9, 69.2)	(61.9; 53.2, 70.2)
If researchers wanted to see medical	1355/3019	299/609	181/511	117/275	599/1278	70/136
records	(44.9; 43.1, 46.7)	(49.1; 45.1, 53.1)	(35.4; 31.3, 39.7)	(42.5; 36.6, 48.6)	(46.9; 44.1, 49.6)	(51.5; 42.8, 60.1)
Note. Table 5 continued on next page						

Table 5. Research Experience and Beliefs Reported by Survey Participants, by Race/Ethnicity

	Total (<i>n</i> = 3151)	Hispanic/Latino (<i>n</i> = 653)	Black/African American (n = 527)	Pacific Islander (<i>n</i> = 284)	White (<i>n</i> = 1316)	Biracial/ Multiracial (n = 141)
Reported Characteristic	Number	Number	Number	Number	Number	Number
	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)	(%; 95% CI)
If had to give a blood sample	1602/3028	365/610	246/513	131/277	693/1278	66/137
	(52.9; 51.1, 54.7)	(59.8; 55.8, 63.8)	(48.0; 43.6, 52.4)	(47.3; 41.3, 53.4)	(54.2; 51.4, 57)	(48.2; 39.6, 56.9)
If asked to give a genetic sample	1342/3015	301/608	177/512	117/275	606/1271	57/137
	(44.5; 42.7, 46.3)	(49.5; 45.5, 53.6)	(34.6; 30.5, 38.9)	(42.5; 36.6, 48.6)	(47.7; 44.9, 50.5)	(41.6; 33.3, 50.3)
If might have to take medicine	852/3022	206/610	115/513	1 34/277	306/1272	30/138
	(28.2; 26.6, 29.8)	(33.8; 30, 37.7)	(22.4; 18.9, 26.3)	(48.4; 42.4, 54.4)	(24.1; 21.7, 26.5)	(21.7; 15.2, 29.6)
If asked to stay overnight in	978/3031	187/612	158/515	122/278	413/1274	35/138
hospital or clinic	(32.3; 30.6, 34)	(30.6; 26.9, 34.4)	(30.7; 26.7, 34.9)	(43.9; 38, 49.9)	(32.4; 29.9, 35.1)	(25.4; 18.3, 33.5)
If might have to use medical	1067/3018	216/606	161/516	125/276	447/1270	40/138
equipment	(35.4; 33.6, 37.1)	(35.6; 31.8, 39.6)	(31.2; 27.2, 35.4)	(45.3; 39.3, 51.4)	(35.2; 32.6, 37.9)	(29.0; 21.6, 37.3)
If didn't get paid	1096/3010	233/606	156/508	99/277	494/1272	44/138
	(36.4; 34.7, 38.2)	(38.4; 34.6, 42.5)	(30.7; 26.7, 34.9)	(35.7; 30.1, 41.7)	(38.8; 36.1, 41.6)	(31.9; 24.2, 40.4)

Note. Table 5 continued on next page

Table 5. Research Experi	ience and Beliefs F	Experience and Beliefs Reported by Survey Participants, by Race/Ethnicity	Participants, by R	ace/Ethnicity		
	Total (<i>n</i> = 3151)	Hispanic/Latino (<i>n</i> = 653)	Black/African American (n = 527)	Pacific Islander (n = 284)	White (<i>n</i> = 1316)	Biracial/ Multiracial (n = 141)
Reported Characteristic	Number (%; 95% CI)	Number (%; 95% CI)	Number (%; 95% CI)	Number (%; 95% CI)	Number (%; 95% CI)	Number (%; 95% CI)
Likelihood to take part in a research study:						
Definitely take part	629/2960 (21.3; 19.8, 22.8)	104/593 (17.5; 14.6, 20.8)	105/493 (21.3; 17.8, 25.2)	104/266 (39.1; 33.2, 45.2)	257/1268 (20.3; 18.1, 22.5)	19/137 (13.9; 8.6, 20.8)
May take part	1835/2960 (62.0; 60.2, 63.7)	393/593 (66.3; 62.3, 70.1)	303/493 (61.5; 57.0, 65.8)	121/266 (45.5; 39.4, 51.7)	121/266 809/1268 (45.5; 39.4, 51.7) (63.8; 61.5, 66.7)	90/137 (65.7; 57.1, 73.6)
Note. CI = confidence interval. Means and percentages are based upon the number of valid responses to each item. Participants who described themselves as Hispanic/ Latino were counted as Hispanic/Latino and not as part of any other race/ethnicity.	Means and percentages c/Latino and not as pari	are based upon the numb t of any other race/ethnici	ber of valid responses to ty.) each item. Participants	who described thems	elves as Hispanic/

Discussion

The current Sentinel Network study adds to the initial Sentinel Network study in several ways. First, lacking funding for CHWs, UAMS recruited university student interns as data collectors. This provided university students hands-on research experience and demonstrated their ability to rapidly collect the data in multiple languages from diverse respondents. The five sites of the original Sentinel Network collected 5,979 surveys over 18 months, with per site participation ranging from 588 to 1,983, for an average of 1,064 per site (*Cottler et al., 2013*). UAMS students collected 3,151 surveys over 14 months. Although we are strong proponents of employing CHWs throughout health care systems, including research, this study documents an additional means of broad community assessment when funds are not available to hire CHWs.

In addition, the current study recruited significantly more Hispanic/Latino and Pacific Islander respondents than did sites in the initial study. The initial study did not report Pacific Islanders as a separate racial/ethnic category; however, the current study included 284 Pacific Islander respondents. Pacific Islanders are severely underrepresented in research and are often aggregated with Asian Americans in health assessments (Applied Research Center & National Council of Asian Pacific Americans, 2013; Ro & Yee, 2010; Roehr, 2010; Srinivasan & Guillermo, 2000). The present study provides one of the first direct assessments of Pacific Islanders' willingness to participate in research. It is notable that Pacific Islander and biracial/multiracial respondents listed insurance/cost/access as a primary concern, with more than one quarter of Pacific Islanders listing this as a primary concern. Although many populations in Arkansas and throughout the United States have experienced increased health care access through the Affordable Care Act and Medicaid Expansion, not all populations receive these benefits. Many Pacific Islanders in Arkansas are Compact of Free Association Migrants and are not eligible for Medicaid Expansion, and many cannot afford insurance premiums and copays (McElfish, Hallgren, & Yamada, 2015; McElfish, Purvis, et al., 2016).

It is imperative to increase minority participation in health research in order to reduce health disparities. This study and the prior Sentinel Network study provide evidence that minority populations are willing to participate in research if afforded the opportunity, even when the respondents are not being paid. If "hardto-reach populations" are willing to participate in research if provided the opportunity, the research enterprise must look at ways to increase such opportunities.

Community Engagement and Use of the Results

Local stakeholders reviewed the questions from the Sentinel Network Survey and selected the best locations for recruitment. Similarly, we have sought, and will continue to seek, input from community advisory boards who represent the community. In this context, the Sentinel Network Survey has provided a broad assessment of community needs and an increased number of respondents providing input into our research agenda. UAMS has used the Sentinel Network Survey data to inform our community engagement efforts targeted at reducing health disparities among minority communities in Arkansas. Furthermore, documentation of diverse respondents' willingness to participate in research if provided the opportunity highlights the need to create such opportunities for these communities. The insights gained from this study were shared with stakeholders and have served as the basis to inform ongoing community-engaged research efforts in the communities. The priorities and information from the Sentinel Network Survey have led to the initiation of 11 collaborative research projects, and others are being planned (Hallgren, McElfish, & Rubon-Chutaro, 2015; McElfish, Bridges, et al., 2015; McElfish, Goulden, et al., 2017; McElfish, Hallgren, et al., 2016; McElfish, Kohler, et al., 2015; McElfish, Moore, et al., 2016; McElfish, Post, & Rowland, 2016; McElfish, Rowland, et al., 2016; Scott, Shreve, Ayers, & McElfish, 2016).

Limitations and Strengths of the Research

The primary limitation of the research is that it was conducted with a convenience sample, limiting generalizability. In addition, the survey was brief and completed by respondents engaged in other daily activities (e.g., laundry, health care, shopping). Student interns reported that recruiting respondents anonymously enhanced participation; however, this approach makes it impossible for the researchers to follow up with respondents to share the survey results or information about research opportunities in which they might have an interest. Furthermore, because the study team agreed to use the same survey that was implemented in other Sentinel Network sites, local stakeholders' input in selecting questions was limited. Although local stakeholders reviewed the survey questions and selected the best locations for recruitment, the level of engagement was broad rather than deep. This broad approach differs from other community-engaged research practices where a smaller number of stakeholders provide in-depth input throughout the entire research process. It is important to note that the authors used this Sentinel Network Survey as a first step in the engagement process, informing more traditional engagement efforts that are described elsewhere (*McElfish*, *Goulden*, *et al.*, 2017; *McElfish*, *Kohler*, *et al.*, 2015). Despite these limitations, the study documents the ability to engage a large number of underrepresented, minority community members in survey research. The study builds on and expands the findings of the initial Sentinel Network study and serves to inform research priorities of the UAMS Translational Research Institute.

Conclusion

As communities and health researchers seek to address health disparities, it is imperative to increase minority participation in health research. Participation in research among minority communities is shown to increase when engaged research methods are used (Minkler & Wallerstein, 2008; Yancey et al., 2006). Although community-engaged research often uses input from community advisory boards, broad assessments of community needs are rarely conducted. The current and prior Sentinel Network studies demonstrate a method for obtaining broad community input on health priorities and willingness to participate in research. Of greatest value, both the current and prior Sentinel Network studies document that minority communities profess willingness to participate in research if provided the opportunity. The studies challenge researchers to consider that the relative lack of research participation among minorities may not be caused by a lack of willingness to participate, but instead by other constraints, including lack of opportunity.

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Compliance with Ethical Standards

This project was determined to be exempt from human protections oversight by the IRB at the University of Arkansas for Medical Sciences. Informed consent was obtained from all individual respondents. The authors have no conflicts of interest to report.

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PROJECTS WITH PROMISE

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Community in Crisis: Confronting Our Heroin Epidemic and Leveraging Community Engagement to Address a Pressing Issue

S. J. Langley-Turnbaugh and M. Neikirk

Abstract

In the fall of 2015, Northern Kentucky University began a sustained, multidimensional effort to explore our region's devastating heroin epidemic. The goal was to engage NKU's students, faculty, and staff with the community through public dialogue, experiential learning, and research. Taken together, our engagements would contribute to public understanding of the crisis and its scope, as well as to evidence-based solutions in every relevant sector, including social and human services, education, public policy, and health care. The initiative began as all such engagement should: with the university listening to the community and then structuring our plans according to that counsel. The purpose of this article is to describe this effort and its outcomes, thus providing a template for colleges and universities wishing to engage deeply around an important community topic. *Keywords:* heroin, opioids, community engagement

Introduction

merica's heroin crisis has reached epidemic proportions recently and rapidly. The Centers for Disease Control reported 3,036 overdose deaths from heroin in 2010 in the United States, a number accounting for just 7.9% of all drug overdose deaths. Five years later, in 2015, heroin deaths had risen fourfold to 12,989. What's more, heroin accounted for a higher proportion of U.S. drug deaths overall: 24.8% (*Hedegaard, Warner, & Miniño, 2017*).

Matters have only gotten worse. Officials have begun to compare the heroin epidemic to the onslaught of HIV and its resulting deaths in the 1980s and 1990s. In 2015, heroin deaths surpassed gun-related homicides, a significant shift given that in 2007 gun homicides outnumbered heroin deaths by more than 5 to 1 (*Ingraham*, 2016).

Northern Kentucky University (NKU), a regional comprehensive public university, is located 7 miles southeast of Cincinnati, Ohio, in an area hit especially hard by the epidemic. The tri-state region (Ohio, Kentucky, and Indiana) is part of a larger section of the nation that has become a sort of Bermuda Triangle of heartland heroin, stretching north to Columbus, east to Portsmouth, Ohio, and into West Virginia. In West Virginia, the death rate from drug overdose in 2015 was 41.5% and in Kentucky and Ohio 29.9%, placing the three states among the nation's five worst for this measure (*CDC*, 2016). All three states also had a statistically significant increase in drug overdose rates from 2014 to 2015, with opioids prescription and illicit—the main driver of drug overdose deaths (*CDC*, 2016).

Three counties—Boone, Kenton, and Campbell, collectively known as "northern Kentucky"—make up the Kentucky portion (population 384,790) of Greater Cincinnati (population 2.1 million). Heroin's impact, although severe statewide, has been disproportionately severe in northern Kentucky; 140 people died of a heroin overdose in 2014 and 2015 (*Kentucky Office of Drug Control Policy, 2016*). Though having twice the population, metropolitan Louisville had 111 such deaths in that same period, and Lexington, with roughly the same population as northern Kentucky, reported only 81 heroin overdose deaths in the same period (*Kentucky Office of Drug Control Policy, 2016*).

Behind the unabated statistical upswing is a story of strained resources as the legal, social services, and health care systems try to keep up. Police report that many of their arrests involve drugs and, increasingly, the drugs involved are opioids. In 2011 in northern Kentucky, the numbers of drug-related incidents and other incidents were nearly equal (*Kalapasev & Young, 2016*). In 2015, 66.3% of incidents were drug-related. From 2011 to 2015 the hospital system that serves northern Kentucky reported a nearly fivefold increase (252 to 1,168) in the number of patients brought to its emergency rooms for overdoses (*Kruetzkamp, 2016*).

The numbers confirm the scale and scope of the heroin crisis in northern Kentucky, but it is the personal stories of loss that drive home the devastation. No gathering, whether at church, school, or even the sidelines of a youth soccer game, is immune from stories of shared loss. Mention a family or friend touched and others listening will tell of their own acquaintances who are struggling with addiction or who struggled and lost. Those interactions are not just anecdotal. The Kentucky Health Issues Poll asks people whether they have family or friends who have experienced problems as a result of heroin. In northern Kentucky, 29.5% of the respondents answered yes in 2016; the next highest region was Lexington at 8.5%, and other regions hovered between 7% and 8% (*Foundation for a Healthy Kentucky, 2017*).

Heroin's relentless and ravaging toll would be a clarion call to any university to get involved, but especially to a university committed to community engagement, as NKU is. Community engagement is one of the five primary goals listed in the university's strategic plan, and it is embedded in both the academic and cocurricular structure. When the Carnegie Foundation created a new designation for community engagement, NKU was part of the inaugural class in 2006. Also drawing NKU to the heroin crisis was an interest in population health, exemplified by construction on campus of the \$97 million Health Innovation Center. Scheduled to open in fall 2018, the center signals NKU's intention to examine population health through a transdisciplinary lens since complex problems require collaborative approaches that free expertise from silos that inhibit innovative solutions. NKU's focus on heroin was designed to demonstrate the value of this approach. How can we prepare students to think differently about the full range of health issues, from wellness to care and policy? And how can the university contribute to community understanding and solutions?

Activities

Community in Crisis launched in September 2015 when the NKU provost convened two planning meetings, one with faculty from across disciplines and one with community members. The morning meeting established an internal team of champions; the afternoon brought the community voice to the table. Author and journalist Sam Quinones attended both sessions. His book *Dreamland: The True Tale of America's New Opiate Epidemic* is widely considered a "must read" to understand how heroin made it to the heartland. The book became a touchstone as NKU and our partners mapped our collaboration, and Mr. Quinones became our frequent collaborator. A portion of the reporting for his book took place in northern Kentucky, so he knew the extent of the crisis here.

Our first meeting with community members proved especially key as we asked them how the university could join them in raising awareness and finding solutions to the heroin crisis. Many at the table were advocates, having taken up the cause after losing a loved one or after seeing heroin's impact on schools, the job market, and health care. All were deeply appreciative of NKU's involvement because it validated and amplified their cause. They advised NKU on general themes that should get attention, including erasing the stigma of addiction as essential to gaining community support for evidence-based solutions, such as a needle-exchange program. One suggestion was to mobilize churches; in response, NKU and local government coorganized "The Heroin Epidemic: A Conversation with Northern Kentucky's Faith-based Community," which drew 135 participants to a local social services center in February. Clergy from a diversity of faiths (Christian, Jewish, Muslim, and Hindu) attended to learn about the heroin epidemic and carry that learning back to their respective institutions and audiences. Speakers provided an outline of the epidemic, its impact, and the efforts to address it. Small-group discussion followed. Agencies addressing addiction had display tables outside the meeting rooms. Faith leaders also were invited to consider ways to collaborate and to exchange ideas on how to do so.

The faith-based conversation was one of several events leading up to a culminating week of events in April 2016. Among the other precursor events were two writing workshops, also held in February—one on campus and one in the community. Mr. Quinones conducted both in collaboration with members of the NKU English Department and its nonfiction writing program. Participants were encouraged to tell their own experiences with heroin and addiction. March brought two additional events. NKU cosponsored a community luncheon honoring the cofounders of Northern Kentucky Hates Heroin, a grassroots group that advocates for public policies that address the heroin epidemic. The university also cosponsored a town hall meeting to discuss evidencebased solutions to the heroin crisis, including needle-exchange programs and supervised injection facilities.

The centerpiece of Community in Crisis came in April 2016, when Mr. Quinones visited campus for 3 days, during which he met with students and community partners both for small-group discussion and in larger settings (15 sessions total). NKU also connected Mr. Quinones with local media for interviews in the Cincinnati market and on Kentucky Educational Television. The main event of the visit was Mr. Quinones's public talk on April 18, which packed NKU's 650-seat concert hall to standing room capacity. Mr. Quinones spoke first, explaining how the heroin crisis unfolded nationally as cheap, powerful powder made its way from Mexico to the Midwest with a sales model that made ordering black tar heroin as easy as ordering pizza. He spotlighted communitydriven approaches to reverse the tide, including an evidence-based treatment program housed in Kenton County's jail. Mr. Quinones then joined a reflection panel that included an NKU graduate student (and former addict) who is operating the jail program that Mr. Quinones had mentioned; a parent who had lost an adult child to a heroin overdose; an NKU professor who studies the

science of addiction; and the director of the Northern Kentucky Health Department, which has adjusted its resources in response to the heroin crisis. Drawn by the gripping stories told from the stage, the audience stayed put for 2 hours, taking full advantage of a 30-minute question and answer period to engage with Mr. Quinones and the panel. NKU arranged for social workers and health counselors to be present to talk with any audience members who wanted that service afterward.

The next morning, NKU cohosted "Breakfast with Sam Quinones: A Discussion with Northern Kentucky Public Officials," attended by 65 local and state public officials. Afterward, Mr. Quinones returned to campus to speak to an audience of 200 educators, social workers, and civic leaders. They were gathered for an all-day think tank on heroin and stigma—a theme suggested by our community advisers.

The year of engagement around addiction wound down with NKU faculty, staff, and friends participating as a team in the NKY Hates Heroin 5K Walk & Run. This was the third year for the benefit but the first year for NKU to organize campus participation. The total count of direct participants in NKU's engagement events over the academic year was approximately 1,200 people in addition to the radio and TV audiences, which occurred in a regional market of 2.1 million people.

Lessons Learned

NKU has derived some "how-to" lessons from Community in Crisis, beginning with personnel capacity. Although leadership and commitment from university administration is key in agendasetting and ensuring academic buy-in across campus, the desired alignment also takes coordination. A point person is required: someone who can take ownership in organization, follow through, and ensure audiences for the activities. Having the key university players as part of a planning committee is important (the marketing office, for example, worked with our team to design postcards and a website); however, the overall effort requires someone who thinks about it every day, all year, and who stays in touch with team members to keep the project moving forward and on schedule. NKU found this support initially in the existing Scripps Howard Center for Civic Engagement, which is accustomed to coordinating campus-community activities. For the longer term, initiatives related to the Institute for Health Innovation will rest with an executive director, a position now being filled in anticipation of the Health Innovation Center's fall 2018 opening.

Of equal importance to a point person is a robust and inclusive team. We found both internal and external partners to be essential.

- Internal partners: Support of the academic administration was important from the beginning; other vital elements included the university's advancement office to help raise funds as well the university's government and corporate relations office to ensure buy-in from the public and business sectors and frequent contact with deans, chairs, and the faculty in general.
- External partners: We tried to engage early and often with population health players in our region: nonprofit agencies providing health and social services; community advocacy groups; and government officials at the city, county, state, and federal levels. All of those partners were part of our planning, practically from Day 1. Their voices were crucial in guiding what we did and, importantly, in ensuring attendance at our events and participation in our programming. There was no doing this without them.

Outcomes

Community in Crisis brought tangible results beyond the discussion fostered. Public policy in northern Kentucky is being rewritten around evidence-based solutions, including a nascent needle-exchange program that the NKU activities did not initiate but did help build political will to support. The faith community is more engaged and more collaborative. Our engagement also produced tangible outcomes involving our students:

- A student journalist focused on heroin in the campus newspaper. In a unique collaboration, her stories appeared jointly in an online "newspaper" operated by a Cincinnati TV station. This also resulted in a summer internship for the student at the TV station, which in turn led to her fulltime employment at the station.
- NKU operates a nationally recognized student philanthropy program, in which classes invest in local nonprofits. One class invested its \$2,000 in a residential addiction treatment center. Before investing, students visited with the center's staff to learn about the work there. The funds

bought furniture for a support group room that the center could not have afforded otherwise.

- The on-campus writing workshop mentioned earlier ended with a call for submissions for a special publication, *True NKU: Nonfiction Poetry and Prose Inspired by the Sam Quinones Writing Residency.* There was a 34% acceptance rate for submissions. This publication (500 copies) was distributed in the lobby of the concert hall before the public talk by Mr. Quinones in the spring.
- Two NKU students majoring in broadcasting made a 90-minute documentary on the heroin epidemic in northern Kentucky. They followed a fellow student addicted to heroin on a buy—and then interviewed her later when she entered recovery. NKU hosted a premiere of the documentary on campus, drawing about 80 people. Portions of the students' work were also included in a second documentary coproduced by an NKU faculty member and broadcast statewide on Indiana's public television network.
- In February, NKU's chapter of the Society of Professional Journalists hosted "The Heroin Addiction Story," a forum on how the media can report on the issue with skepticism and sensitivity while resisting the urge for sensationalism. More than 75 students attended, hearing from journalists, a police chief, and addiction treatment specialists.
- Twenty posters illustrating student research on addiction topics were part of an expo in the lobby prior to the community talk by Mr. Quinones. For example, one student team surveyed 295 NKU students about harm-reduction strategies (respondents were reluctant to accept needle-exchange programs, as is the public generally, but open to improved access to medication-assisted treatment).
- On the day of the Quinones lecture, an NKU team organized a lunch-hour expo in the Student Union that included 15 agencies involved in antiaddiction and heroin education. Outside, an old Volkswagen microbus was parked on the plaza. "Casey's Bus" belonged to a 22-year-old college student who died of a heroin overdose in 2002. From the bus, Casey's parents and other volunteers distributed information about addiction treatment and support; they also trained visitors on the use of the opiate overdose antidote Narcan (naloxone). Those who were trained received overdose response kits (60 kits were distributed).

The internal outcomes resulting from Community in Crisis also involved broader academic impacts:

- The nursing program is revising how it teaches about addiction. The program is in the process of developing a simulation in which the students will be confronted with teaching opportunities or other interventions related to patients who have been sent home on opioids.
- The Department of Counseling, Social Work and Leadership, and the Department of Psychological Science have proposed a new certificate program. The 21-credit, graduate certificate will focus on addictions research and practice. It targets people with undergraduate degrees in helping professions, such as human services, social work, counseling, psychology, and nursing, and will prepare them for work as counselors or researchers. As one member of the proposal team explained: "While planning events about the opioid epidemic, we discovered previously unrecognized and complementary areas of interest and expertise."
- NKU has a new Signature and Emerging Research Area competition to identify areas of strength and potential growth. One of the projects selected is "Population Health: Opioid Dependent Pregnant Women & Neonatal Abstinence Syndrome." It is led by faculty from NKU's College of Informatics, and it includes contributions from Education and Human Services, Nursing and Health Professions, Arts and Sciences, and Business. The NKU team is evaluating infrastructure and gaps in care for 60 pregnant women who are being treated for addiction at a local clinic.
- The College of Education and Human Services collaborated with the Kenton County Detention Center to secure grant funding to monitor and improve the center's heroin prevention and treatment efforts with the goal of ensuring evidence-based practices that work. The work includes a focus on Quick Response Teams that intervene during and after a 911 overdose call as a way to encourage treatment rather than incarceration.

Community in Crisis did not end with the academic year. Rather, the year was a catalyst for ongoing engagement and effort. In February 2017, NKU cohosted a follow-up town hall on the opioid crisis. "Heroin by the Numbers" showcased a state database providing ready access to statistics about the crisis that would be useful to health and social services professionals, researchers, and advocates. The forum was repeated as a lunch-and-learn on campus later in the day for faculty. The town hall drew about 65 people; the lunch-and-learn about 20. Also, the Scripps Howard Center for Civic Engagement and the Kentucky Campus Compact worked with the National Issues Forum in Davton, Ohio, to develop a discussion guide that can be used to foster civil, informed dialogue about policy options for addressing the opioid epidemic. The Forum had discussion guides on a range of topics (end-oflife care, income inequality, hunger, safety, and justice, to name a few) but not on the heroin crisis in America. In late 2017, a guide was released and is now in use nationally as a tool for small-group discussion around public policy approaches to addressing the epidemic. Also as a result, NKU arranged to train facilitators to use the guide for discussions at civic clubs, libraries, church basements, and other community venues.

NKU also has remained deeply engaged with its community partners. The Northern Kentucky Heroin Impact Response Task Force was formed in 2012 to bring various agencies working on the opioid epidemic together to coordinate effort and focus. NKU faculty members were involved from the inception, but Community in Crisis boosted NKU's involvement in the task force, including in planning its 2016 annual conference that drew nearly 200 people for an update on regional efforts.

The most lasting outcomes of Community in Crisis are still ahead. The first involves the formation of the Ohio River Valley Addiction Research Consortium (ORVARC), which seeks to find ways for colleges and universities in the "heroin belt" of the Ohio River Valley to collaborate on research initiatives related to the opioid epidemic. Mr. Quinones suggested such a consortium in an op-ed written in preparation for his NKU visit. An NKU team has developed a proposed structure for the consortium and hosted initial meetings to launch it with an eye toward intercollegiate and interdisciplinary cooperation on research projects and an annual conference. Although this consortium remains a work in progress, initial support has included colleges and universities in Illinois, Indiana, Kentucky, Ohio, Tennessee, and West Virginia, and scholars from medicine, social work, addiction treatment, nursing, and other fields. NKU hosted 135 people from higher education and community agencies in those states in late 2017, for an inaugural ORVARC symposium. Though still in start-up phase, ORVARC has an advisory board and is on track to host a second symposium on another campus in 2018. Our work in launching ORVARC also connected NKU to the annual National Rx Drug Abuse & Heroin Summit in Atlanta. NKU will be lead sponsor of the 2018 summit—a role that will permit us to discuss our engagement on this topic and to strengthen our ties to regional and national partners as we embed addiction teaching and research into the NKU academic core.

One of the most significant lasting changes brought about by Community in Crisis is internal and far more generalized than the topic of heroin. By working together in real time to marshal university resources around a single theme, NKU's administrators and faculty created an internal template for collaboration across disciplines and colleges. The template already is in use again. For 2018, NKU has invited author and researcher Matthew Desmond to campus to talk about his book Evicted: Poverty and Profit in the American City. The book looks at housing insecurity, which-like heroin and addiction—is a population health topic, as being homeless or spending a disproportionate share of personal income on housing represents a threat to individual and family health and, when multiplied across a community, represents a threat to population health. As Dreamland was for heroin addiction, Evicted is for housing insecurity. Certainly we could have engaged around heroin and housing without them, but the books, their authors, and the expertise they bring provided a common understanding of the themes and issues among all players (on campus and off) and a focal point for programming, activities, and teaching.

Thinking about the internal changes more broadly, the activities described in this article have reframed our thinking around our Health Innovation Center as opening day approaches. We've stepped away from thinking about it as a building and instead have focused on what will happen inside—a space where transdisciplinary approaches connect to real-life community issues and needs.

Conclusion

Community in Crisis was intended to amplify the existing efforts in our community to inform the public, foster collaborations, and contribute to evidence-based solutions while also having meaningful impact on campus. A successful year also would position NKU to remain engaged on this topic while simultaneously establishing a template for similar comprehensive engagement around other topics important to our community. Those goals were met. Doing so required an open dialogue at the start with key stakeholders who could guide our efforts; it required executive-level leadership to ensure resources and commitment; and it required a willingness on the part of our students, faculty, and staff to align with the common goal of elevating public understanding of the deadly, devastating heroin crisis in northern Kentucky.

Through the efforts outlined in this document, NKU provided a platform for in-depth and ongoing discussions about the challenges associated with this epidemic. Our community is now more educated on this topic. New connections and partnerships are forming throughout our region to address these challenges. And our university is now more experienced in multidimensional engagement on a population health issue as our Health Innovation Center moves closer to its opening day.

NKU brought some strengths to this effort, including an existing university infrastructure committed to community engagement. Ours is the youngest of Kentucky's eight state universities, founded in 1968 with a commitment to give back to the community that sought state funding for a regional, comprehensive, public university. Subsequent decades saw unprecedented community engagement and new strategic partnerships, all of which brought national recognition to the university for its contribution to the economic and social vitality of northern Kentucky. The Community in Crisis initiative in the 2015–2016 academic year followed in this tradition and also demonstrated new ways that NKU could take a lead role in educating the community on the issue and on practical, workable solutions.

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Building and Sustaining a University-Anchored Collaborative Public Safety Data Network:The Northwest Indiana Model

Joseph Ferrandino

Abstract

This article details the Northwest Indiana Public Safety Data Consortium (NWIPSDC), a privately funded data-sharing network housed at Indiana University Northwest, an anchor institution, that includes several private-sector participants and over 30 public safety agencies at all levels of government (local, county, state, and federal). The NWIPSDC is fully explained, as are the academic underpinnings that supported its foundation (anchor institutions, network governance, and organizational and systems theory). The consortium is then detailed. The article concludes by overviewing, from the faculty perspective, the benefits and opportunities as well as challenges and drawbacks for those considering this type of community-engaged service/research on such a scale and how administrators can help to alleviate these issues and concerns.

Keywords: university-community networks, anchor institutions, governance

Introduction

This article details the Northwest Indiana Public Safety Data Consortium (NWIPSDC), a public/private collaborative information-sharing network managed and administered at Indiana University Northwest, an anchor institution in the northwest region of Indiana. The community-engaged network consists of private companies, a university professor, over 30 law enforcement agencies across the four counties of northwest Indiana, and several other specific organizational nodes that supply and/or utilize information produced by the consortium, including the second-largest newspaper in the state.

The article first discusses what the NWIPSDC is, how the network was built, and how it is now structured and managed in accordance with the academic foundations and influences that framed and supported its creation. The article then details the advantages and the drawbacks of the consortium from the faculty perspective to add to our understanding of intensive community-engaged applied research relationships and networks as they become more commonplace for both institutions and their faculty. This includes suggestions for administrators to help overcome the drawbacks and disadvantages, especially for institutions that value and want to encourage this type of intensive community engagement among faculty.

What Is the NWIPSDC?

The Origins

Like most community engagement activities, the NWIPSDC started as a single relationship in January 2012 between the Gary Police Department and one professor at Indiana University Northwest. A new chief of police, the eighth in 5 years, had been hired from outside the department and met with the professor through intermediaries at the department and the university's Center for Urban and Regional Excellence. During a 2-hour meeting, a relationship was born in which the department would share much of its data with the professor, who would then use GIS and other tools not available at the police department to turn their data into timely and ongoing information to be utilized for several purposes.

For context, the population of Gary (where the university is located) declined from 102,000 to 80,294 from 2000 to 2010 (U.S. Census Bureau, n.d.). A recent parcel study by the city revealed that 6,902 of the 58,235 parcels surveyed (11.9%) contained a vacant and abandoned structure (City of Gary, 2014). The city, which is home to the ailing American steel industry, saw the percentage of people in poverty increase from 25% in 2000 to 35.9% in 2010 (U.S. Census Bureau, n.d.). These socioeconomic factors led to Gary's being dubbed the nation's "murder capital" in the 1990s. Over the past 5 years alone, Gary has experienced 231 homicides in a city with an estimated 77,858 residents as of 2016 (US Census Bureau, n.d.) for an average annual ratio of 1 murder for every 1,732 residents. Between 2005 and 2011, 15.5% of all the homicides in Indiana (361 of 2,322) occurred in Gary, which comprises just 1.2% of the state's population. In 2007, one of every five Indiana homicides occurred in Gary. However, the Gary Police Department in January 2012 had depleted resources and tools to track crime. As a service, the professor agreed to store, analyze, map, and transform their data into usable information at no charge while working with them to build their own capacity internally. The scope of this work included analyzing all of their calls for service, current and historical homicides and shootings, and Shotspotter confirmations (a gunfire

locator); creating hot spots; evaluating proactivity, staffing levels, and response times; and providing general objective consultation to the new administration.

As soon as the data collaborative began, it was clear that much more information needed to be mapped, so the professor and police department contact reached out to other city departments, receiving records of historical fire and EMS calls, business licenses, and other information. Over the course of the following 13 months, all analytical work for the department was performed at the university, which provided use of the software, and information was supplied to the department mainly in PDF format via e-mail. However, the wealth of information being created was leading to the necessity of acquiring other data to enable more effective public safety. It also became clear that the collaboration needed to transition from reliance on university technical assistance to greater intradepartmental analytical capabilities, and that the technology being used needed to be reconsidered to enable greater impact within the department and between the university, department, and community.

The Evolution

The "region" (as Northwest Indiana is referred to locally) is far more than just Gary. Lake County, where Gary sits in the north along Lake Michigan, has 19 different municipalities and more than 21 different policing jurisdictions. The population of 490,228 represents 7.4% of Indiana's population, but the wider four-county region that includes Porter, LaPorte, and St. Joseph counties has a population of 1,036,366, or 15.7% of the state population (U.S. *Census Bureau, n.d.*). Crime and its effects, including influences from the greater Chicagoland area, are a persistent and pervasive regional issue.

In February 2013, the NWIPSDC added a second police department in East Chicago, a densely populated, historically violent, majority Hispanic city adjacent to Gary's western border on Lake Michigan. The same services were offered as those given to Gary PD, and East Chicago began sharing their data as well. In short order, five more police departments joined, and the NWIPSDC began to take form. At this juncture, all of the work was being done as a service for and within each criminal justice agency individually.

As the consortium grew in numbers, reach, scope, population served, and public attention, a local energy company (NIPSCO, Northern Indiana Public Services Company, a NiSource subsidiary) began to access some of the NWIPSDC data in hopes of working toward ensuring employee safety when working in Gary and East Chicago. At the time, the consortium was still centered in the university, where data would come in and be processed, with the result sent to each department as information, but this approach limited the potential impact of the entire NWIPSDC. In order to reach the regional data-sharing network envisioned, NIPSCO donated to the NWIPSDC \$10,000 to purchase a single ESRI ArcGIS Online Organizational account for 50 users for 1 year (thus far, NIPSCO has funded the project for 6 years). This account is administered by the university but includes multiple log-ins for each department to share while keeping information secure on the system. Overnight, the consortium became an information-sharing and analytical hub that brought the university's technological capabilities into each participating criminal justice agency, with all information seamlessly integrated between agencies at no cost to them.

Most of the agencies use different information systems, so the NWIPSDC account was able to convert all data into a single format and share information across all member agencies at once. This allowed jurisdictions to analyze internally and externally developed data within their communities as well as being informed regarding the surrounding communities. Within the year, there were 30 total agencies across four counties participating in the NWIPSDC, representing the private sector, local police, county police and probation, state police and parole, and federal partners. The persistent problems faced in the region—differing data formats used by agencies, reluctance to share data, and a lack of funding to create or buy new data—have been acknowledged throughout the public sector in utilizing GIS (*Huque, 2001, p. 259*) and are simultaneously addressed through the NWIPSDC.

The Current Iteration

The NWIPSDC still consists of a single professor on the university side, which is less than ideal. Two agencies have become entirely self-sufficient in utilizing the system, with only the occasional need for technical assistance or support, which is provided as part of being a member of the consortium. Information is uploaded into the system to feed into "commonality of picture" applications that are being built or have been built for each agency. These applications permit the agencies to analyze data, query information, summarize information, and create their own layers of editable information with the application. Applications are customized to each agency, given its mission and function, and are shared with others in the network that need access to that information to formulate strategies and evaluate their actions.

In 2014 the NWIPSDC entered into an agreement to have the second-largest newspaper in the state, *The Times of Northwest Indiana*, host public crime map applications. This mutually free-ofcharge arrangement offers residents of 17 jurisdictions full access to interactive crime maps they can search as needed. These maps are updated each week and have had over 700,000 total views. The newspaper created a landing page for these maps as an informational hub on serious crime in the region, with each agency selecting the type of information disseminated and the applications maintained by the professor spearheading the project. Currently, the NWIPSDC has grown to support local, county, state, federal, and private partners in ways that were never considered when the network was born.

Academic Foundations of the NWIPSDC

Academia, in its most common form, is governmental in nature, and many of the changes in the academy reflect the wider societal, economic, political, organizational, and cultural struggles facing the public sector generally. This is especially true of urban-based universities in challenging environments. Despite experiencing often significant internal institutional problems on campus, universities are increasingly expected to provide services externally in the wider regional community. This transition requires application of established frameworks to guide these increasingly boundaryblurring, fast-moving action networks that span institutions, sectors, jurisdictions, disciplines, and comfort levels. The NWIPSDC reflects this transition in urban regional public universities, and the following section details its academic foundations from a perspective that blends the concepts of anchor institutions, network governance, organizational theory, and systems theory.

Anchor Institutions

The reality and conceptual framework of anchor institutions was the starting place for creating and building the NWIPSDC. An "anchor" is a noun and can be a person (such as one that is relied on and needed by others for strength or support), a place (such as an anchor store in a shopping plaza that supports and provides lifeblood for other businesses moored to it), or a thing (such as a heavy metal device that holds ships of any size in place, providing stability). Universities, especially in postindustrial urban locales, are increasingly being referred to and relied on as "anchor" institutions to provide economic lifeblood and support for other organizations, including resource-depleted governmental agencies, nonprofits, and even private sector entities. Furthermore, the term also describes the emerging permanence of the campus's responsibility in keeping the reliant local and regional organizations tethered and afloat in increasingly rough seas.

The move toward building or enhancing external engagement between universities and their communities accompanies an internal focus on applied research on many campuses, which makes sense as the two concepts are largely complementary and dependent in nature. Both community engagement and applied research require the building of collaborative, open networks with the university playing an increasingly central role in this process as an "anchor institution" in many urban areas (Birch, 2009; Birch, Perry, & Taylor, 2013; Cantor, Englot, & Higgins, 2013; Kronick & Cunningham, 2013; Langseth & McVeety, 2007). The view of metropolitan universities as anchor institutions is founded on the principle of making a sustainable difference in the community anchored to them and extending beyond cities to wider regions (Birch et al., 2013; Cantor et al., 2013). Thus, anchor institutions are created by the abundance of network hubs based in the university with nodes and ties extending outward. These network hubs eventually and essentially form institutional anchors that provide a framework for community engagement initiatives.

In accord with the anchor institution framework, the NWIPSDC was structured as an anchor entity for a regional public safety network. Rather than being housed within any one agency, the NWIPSDC is anchored at Indiana University Northwest, which provides technical support for each agency that joins, acts as a cornerstone that attracts other agencies, and provides a permanent structure that can be relied on by participating agencies for the foreseeable future. It is an anchor with nearly 40 tethers and reflects the university's emergent commitment to community-engaged service through applied research. This structure provides access to the NWIPSDC throughout the region served by the university and has been essential in its growth.

New Governance

Anchor institutions have not developed in isolation. The move toward a "new public management" paradigm and its focus on tool-based network governance has permitted anchor institutions to reinvent themselves as network anchors that provide essential tools within the local governmental, nonprofit, and private sector organizational network. At its core, new governance represents the inclusion of "third parties" to govern effectively in modern systems, especially relative to the alleviation of social problems (see *Salamon, 2002*). Agranoff (*2003*) stated that "no single agency or organization at any level of government or the private sector has a monopoly on the mandate, resources, or information to deal with the most vexing of public problems" (*p. 7*). This framework has influenced many governmental agencies, especially those in urban areas, to reciprocally address chronic issues and social problems in ways that combine university expertise and resources with local government power and authority.

The NWIPSDC reflects all of the tenets of new governance (see *Salamon, 2002*) rather than traditional public administration. For example, the Consortium is funded by a private-sector donation and combines the public and private sectors across four counties to address the pressing social issues of crime, violence, and public safety as well as the delivery of these services. The collaborative network structure of the NWIPSDC has no hierarchy, is flexible in permitting new agencies to join, is tool based rather than program based, and enables agencies and participants in multiple ways with no added structure. In fact, the NWIPSDC is so "new governance" that it does not actually exist outside new nodes and ties within long-existing public and private organizations.

The NWIPSDC has a structure that reflects several different types of networks simultaneously. By its own underpinnings, the NWIPSDC is a public-safety network that was created by rational choice on the part of the actors, and previous research reported that Indiana had only one such network prior (see *Williams et al.*, 2009). The consortium also meets the definition of an information dissemination network in that it is designed to facilitate the exchange of data and information across agencies and sectors to enhance knowledge (Agranoff, 2006; Eggers & Goldsmith, 2004). The network is also developmental in that it increases, through partner information exchange, the "member's capacity to implement solutions within their home agencies or organizations" and meets the criteria of an action network "wherein partners came together to make interagency adjustments, formally adopt collaborative courses of action, and deliver services, along with information exchanges and enhanced technology capability" (Agranoff, 2006, p. 59). It can also be viewed to some degree as a collaborative policy network (Weare,

Lichterman, & Esparza, 2014), as it focuses on making changes within partner agencies where they are sought by the agencies themselves.

Organizational and Systems Theory

Institutional anchors and governance-based networks such as the NWIPSDC cannot be created or effectively function in a vacuum and need to be guided by a strong theoretical framework that integrates organizational and systems theories. Criminal justice organizations, especially police organizations, are highly institutional and resource-intensive. By nature and tradition, the "system" is mainly closed-rational at worst and open-natural at best. Police departments strongly exhibit the rational system hallmarks of rigid hierarchical bureaucracy and goal specificity, and many are still closed off from their environments (see Scott & Davis, 2007, for broader systems discussion; Ferrandino, 2014, as it applies to policing agencies). However, in the "community-oriented" era, many departments have become more natural, acquiring more complex goals (service rather than law enforcement and reducing crime, for example) and adding a layer of informal structures as departments became more open with community members and universities, for example (Ferrandino, 2014).

The existence of the NWIPSDC is evidence of movement toward a more open criminal justice system in northwest Indiana. Accordingly, the entity was created to automatically network formerly closed-rational, institutional, connected organizations rather than trying to change them structurally. This is consistent with the idea that the network did not alter organizational boundaries in any way except for making them more porous and connected relative to the flow, accessibility, and use of information (*Agranoff,* 2006). This approach, however, also requires universities, which are largely rational and natural systems, to become more open and interact in new ways with their environment. Such interaction is the cornerstone of the anchor institution concept, linking it directly to the organizational theory and systems theory framework. This juncture is likely the hardest for the faculty member and administrators to navigate in this type of engagement.

Benefits and Opportunities, Drawbacks and Challenges of this Model

The NWIPSDC is not an entity unto itself but rather a collection of actors in existing organizations and organizational networks that share information in one "space" at the same "time." As a result, there is absolutely no need for any participating organization to change anything about its structure. Rather, the concept is to have them change their policing process to one that is network oriented, tool based, and open, having greater connection to and exchange with its environment, with more of the analytical work led by the departments through self-help rather than the current technicalassistance-heavy approach with the university. It is essential to utilize strong academic foundations if a university, group, department, or faculty member is going to build a community-engaged, collaborative, sustained information network that spans sectors of a region, turning theory and research into practice. However, that is just one essential element to creating, maintaining, and growing this type of network.

The NWIPSDC is a practical example of the Carnegie conceptual definition of community engagement (*New England Resource Center for Higher Education, n.d.*):

Community engagement describes collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity.

The purpose of community engagement is the partnership of college and university knowledge and resources with those of the public and private sectors to enrich scholarship, research, and creative activity; enhance curriculum, teaching and learning; prepare educated, engaged citizens; strengthen democratic values and civic responsibility; address critical societal issues; and contribute to the public good. (*"How Is 'Community Engagement' Defined?," paras.* 1–2)

This form of community engagement with a university can bring great benefit if done properly, but it can also come at great cost to the university, partners, and community if not founded conceptually on the footing most likely to succeed. Thus, the university must not only provide vision and technical expertise, but also the academic knowledge needed to properly build and manage such networks, even if they are created organically. That said, the agencies also have an essential role to play in this process, and each member has its own organizational changes, challenges, politics, and pressures that must be acknowledged and managed in addition to the actual work administering the network. Thus, the rest of this article focuses on the benefits and drawbacks of the NWIPSDC as well as the ongoing opportunities and endless challenges.

Benefits and Opportunities

The entire premise of building collaborative, universityanchored service networks is that they bring benefits to the participants and the region (or city) served. These benefits, and the opportunities they present, are wide-ranging. The region being served should always benefit the most from anchor-institutionbased community engagement networks, but these benefits are likely the most difficult to measure as they are dispersed. This stands in contrast to a partnership between a faculty member or group of faculty members and a single outside organization, or a single short-term project with an outside entity, as occurs in many service-learning projects. One benefit of the NWIPSDC has been that its data is shared with the public through crime maps and is also a resource for cities and agencies applying for grants. Having the data already formatted and queriable allows the NWIPSDC to respond to any regional data request, whether it be from government, media, or the private sector. It is a general resource as well as a specific asset.

The relationships built through the network have led to the development of many different projects that have benefited cities in the region. For example, two police chiefs who sought to diversify their departments turned to the university to aid in this effort after trust was established, despite this type of activity not being the direct goal of the project. After a series of meetings, several faculty members collaboratively developed a plan to increase the success rates of diverse applicants. This included mock interviews, a testtaking session that offered tips for succeeding on the written test, and support from the local YMCA to prepare candidates for the physical test. In the end, one department hired its second female officer in its 120-year history, and a Black male candidate was fifth on the hiring list and if hired would be the first Black officer ever hired in this department. That same chief received a state-level award for transparency in government in a county with a history of political scandal. This diffusion of benefits has occurred across the spectrum as the network has grown, produced quality work, and created trusting relationships, with the departments incurring no costs at all.

The university benefits from the NWIPSDC also. A large number of positive news articles over time, combined with the NWIPSDC's starting to reach a more national audience, have provided the school with an anchor for its efforts to be become a "community-engaged campus" as it works toward that Carnegie designation. In addition, the project has spurred several professors across campus to request guest lectures and initiate their own GIS-based projects, such as a history professor whose class built the historical Potawatomi Trail of Death, an instance of forced removal of Native Americans from the area, into an interactive map. The university is also listed as a sponsor of the Regional Crime Report (the landing page of the newspaper partner) and is noted every time the consortium is mentioned in the media or presented at conferences. Finally, the NWIPSDC provides an example of indepth collaborative community networks for other faculty as they learn the scope of community engagement opportunities and begin or expand their own efforts.

Students benefit by looking at real local data, in the form of maps and applications in undergraduate criminal justice classes, as they are introduced to techniques and technology that would not exist without the NWIPSDC. In addition, the NWIPSDC has provided numerous learning and service-related opportunities for classes and students. For example, administering a data consortium across an entire region ensures that students can do projects, conduct research, and analyze data that is pertinent to them, and can share these results and ideas with decision makers, giving students actual input into policy decisions and a better understanding of how the agencies they hope to work for someday operate. It also brings a GIS component to their education that would not be present otherwise. In combination, this benefit has led to a class project (in a master's-level management science class) that analyzed fire and EMS calls for a city in the region, then provided input as to whether the city should have two fire stations instead of one and determined the optimal location of the new stations based on city parameters, demographics, call volume, response times, traffic patterns, and call projections. In another class project in a graduate capstone course, the students created the Gary Homicide Map, a publicly available, GIS-based web map application that follows every homicide in the city starting in January 2014. Gary has had one of the highest homicide rates in the nation over the past three decades, so this project had clear implications for the students and offered benefits to the city and region in terms of understanding homicide events, the victims, who was charged (if anyone), and the

details and results of the case, giving victims a place to be remembered. Most recently an undergraduate capstone course mapped every police shooting in the nation in 2017, a project that gained front-page coverage.

As a result of the network, two students have been hired by participating agencies that have created positions for them, conducting analysis and using GIS within the department. Another student, a patrolman working on his MPA, was able to divert some of his time as his department's crime analyst, a position that did not previously exist. This helped his résumé as he moved to a federal law enforcement position. In addition, two successful Project Safe Neighborhoods grants totaling \$600,000 have been awarded to two NWIPSDC participants with the administrator as the principal investigator.

Finally, there are numerous benefits for faculty engaged in this type of service, which provides the clear ability to integrate service with their teaching and research and the ability to engage firsthand in evaluation and policy making. The network provides faculty access to people who run agencies, making service-learning projects, student internships, and other endeavors far easier to implement. It also provides a pathway for faculty to turn their research into practice through consulting with police and probation chiefs as well as other important decision makers in the community. Furthermore, it provides opportunities to help participants by serving on committees, boards, and panels, as well as presenting at invited speaking opportunities. Such efforts are also likely to expand the faculty member's media profile and increase the number of grant opportunities, awards, and other acknowledgments that contribute to their career through promotions and vitae building. This is a quintessential reflection of the citizen-scholar model (Pestello, Saxton, Miller, & Donnelly, 1996).

In sum, the benefits of building a network as expansive as the NWIPSDC are wide and deep; they are found at every level, from student to faculty member, department, and university, to all the agencies involved to varying degrees and ultimately to the public served across the region, the same population served by the university. That said, the benefits are diffused and wide in scope. Additionally, there are diverse and challenging drawbacks that should not be taken lightly or understated if a faculty member chooses to pursue building such an expansive network.

Drawbacks and Challenges

The NWIPSDC is extremely time intensive in both practice (doing the actual work required on data, mapping, application building, training, being available for questions, helping as many people as needed) and process (maintaining existing relationships, building new ones, managing competing demands and providing equal attention to all members). Junior faculty, for all the benefits such a network could bring, must be aware that at most institutions this type of service is welcomed, but not at the expense of teaching, research, and other service obligations, meaning a faculty member undertaking an endeavor with the scope of the NWIPSDC must excel at the other areas in order to "pay for" the time dedicated to the network. Such a project is a major challenge not only because of its scope but because policing agencies are 24/7 enterprises, and this type of service will extend beyond office hours, semesters, and weekdays. Trying to build a network like the NWIPSDC but lacking the time required to support it will lead to its failure and will likely hurt other areas of a professor's work. Thus the tremendous potential upside of such an endeavor comes with considerable risk. Administrators could mitigate this difficulty through release time for such service work or by altering promotion and tenure guidelines to explicitly value it as important to the university and its mission. Regardless, the major resource that faculty need for this type of work is time, and administrators need to be cognizant of the time it takes to build the relationships, do the work, promote and improve the project, and keep it alive and beneficial.

Building external relationships, especially those in networkstructured entities like the NWIPSDC, also takes time and presents unique challenges. Community partner research indicates that such partnerships may reveal conflicts in incentives to participate and gaps in organizational capacities on one or both sides (Ferman & Hill, 2004). Law enforcement, parole, and probation agencies are in general not used to working with professors or other outsiders, and they are suspicious of motives by nature. Ulterior motives, such as a professor using the network for the sole purpose of enhancing a tenure dossier, will reflect on not only the individual but the anchor institution and can damage future reciprocal relationships, jeopardizing opportunities for other faculty members and students. The involved faculty member(s) must listen carefully to what the network participants want and focus on building relationships, not a data-sharing network. Great pains must be taken to nurture these relationships, show respect, give credit, and build trust until the institutions are networked beyond the police chief and the professor, forming a lasting collaboration. Achieving that point remains the driving goal of NWIPSDC in all its facets.

Such a network must be open to any and every agency that wants to participate, which requires more and more of the faculty member's time as the network grows. Over time agencies must transition toward self-help, but the time and effort required because of other realities—unlimited inclusion, diverse goals, and uneven commitment—are drawbacks that must be acknowledged on the faculty and university side. Agencies will use the network unevenly, and a faculty member must be flexible on that front as well, remaining patient and managing these relationships.

The NWIPSDC also has a built-in advantage in its funding mechanism that may be hard to duplicate on other campuses. A local energy company funds the NWIPSDC through a private donation to make it free of cost to network agencies, reducing but not eliminating red tape and bureaucracy within the university. Different funding mechanisms bring different strings that faculty must navigate, adding a burden to building and maintaining such a network. Faculty must be prepared to fight internal hurdles as well as maintain external relationships, and both require great energy commensurate with open system boundary maintenance. This is perhaps the area where university administrators can play the greatest role in the success of any initiative similar to the NWIPSDC. These are new relationships that blur boundaries, and universities are generally more averse to potential liabilities than desirous of reaping potential benefits. To mitigate such concerns, administration might consider creating a university center; likewise, the individual faculty member can minimize risks by staying up to date on the changes, new partners, and new boundaries being formed. Faculty are likely to enjoy the work and shun red tape, and would likely need guidance as they raise questions for the first time. The more informal approach of the NWIPSDC is a drawback in that sense.

Faculty must also approach building such a network with hopes of putting themselves out of the center as technical assistance gives way to self-sufficiency among the community participants. To accomplish this goal, the faculty members must be constantly available for the agencies and remain apolitical while dealing with political actors and organizations. This is far easier said than done. In addition, faculty members must sacrifice some ability to publish and present using data. This may be an unacceptable obstacle for many academics, especially those who are untenured and pressured to publish. In essence, the service and its benefits across the spectrum need to be at times prioritized over using the vast data being collected and analyzed, meaning application of knowledge is more important than its wider dissemination. This represents a new approach for faculty members that may be more suitable for certain types of institutions (e.g., small liberal arts colleges and comprehensive regional campuses) rather than research-intensive campuses (see *Weerts & Sandmann, 2010*). However, urban campuses are uniquely positioned to perform this type of service, use it in their teaching, and build a reciprocal research agenda that benefits the partners, students, and faculty member(s) involved. Though a fine needle, this can be threaded with forethought, patience, and innovation. That said, as the goal is to move toward self-help and away from technical assistance, moving the institution away from the center of the network is one goal of the project and the ultimate measure of its success.

Conclusion

This article has detailed the NWIPSDC, its origins, evolution, current iteration, future, and academic foundations. NWIPSDC is a multifaceted data-sharing network anchored at Indiana University Northwest with over 30 participating agencies across four counties, multiple levels of government, and multiple sectors.

The realistic benefits are conservatively presented here on multiple levels, including for the region's population, its respective jurisdictions, the university, the students, and the faculty member that founded the consortium. It is left to future research to determine the statistical effects of the NWIPSDC within these levels, as this article was intended to share information about the network rather than tout its impacts. In this light, the drawbacks and challenges for faculty in creating, expanding, and maintaining such a network are detailed to provide a balanced case for performing this type of activity in community-engaged urban universities in regions of need, with consideration to the problems that will be encountered along the way. University administrators are key in helping such an entity come to life, grow, expand, and evolve and are critical players in transitioning such networks to collective impact initiatives. To accomplish this, they need to be especially mindful of the resource of time rather than money, enabling faculty to be more entrepreneurial and lessening bureaucratic hurdles that are inevitable but manageable.

As a final note, this unique network may not be replicable, but similar projects can be implemented in various forms, shapes, and sizes in any region with its respective university anchor, should the conditions merit its creation and a faculty member is willing to deal with all the drawbacks and challenges to realize the potential benefits and opportunities. This holds true across many fields that can adopt this model to address their issues the way we have crime and public safety.

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DISSERTATION OVERVIEWS

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Using Service-Learning to Enhance Employability Skills in Graduate Business Capstones: A Dissertation Overview

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Abstract

This dissertation overview summarizes a study that examined the alignment between employability skills employers need and employability skills graduate business students gain through service-learning in business capstones. This nonexperimental, mixed-methods, comparative study assessed whether the inclusion of service-learning in capstone courses influences students' development of employability skills. The top three employability skills enhanced by service-learning were decision-making, presentation skills, and teamwork; only presentation skills showed a significant difference for students whose capstone included service-learning versus those whose did not. Exploratory factor analysis (EFA) found a four-factor solution, and one factor, collaborative learning, was significant for service-learning. Qualitative data from semi-structured interviews revealed that decision-making, teamwork, and presentation skills were enhanced by service-learning. Findings show alignment between collaborative learning skills needed by employers and those enhanced through service-learning, and that the instructor's role in structuring projects is key to learning.

Keywords: service-learning, mixed methods, MBA, business education, capstones, employability skills

Introduction

igher business education faces many criticisms from stakeholders. Business leaders from corporations such as Microsoft, Apple, and Cisco have criticized academia for using obsolete educational approaches (Symonds, Schwartz, & Ferguson, 2011). Historically, critics have complained that business education does not help students learn employability skills (Elsaid & Schermerhorn, 1991), which are skills necessary for career success in any environment and at all levels of employment and education (Overtoom, 2000). Another potential problem for business education is a perceived skills gap, or the gap between what workers know how to do and the skills required by today's knowledge workers. This gap is growing, and there seems to be a mismatch between the skills employers need and the skills obtained by managerial, professional, and technical workers.

Using traditional instructional approaches to create business education curricula that bridge perceived gaps between theory and practice can be challenging. Some business education programs have responded by incorporating a business capstone experience into the curriculum. A capstone is an educational experience intended to synthesize the content learned in a particular major (*Gardner & Van der Veer, 1998*). Although capstones are widely used by traditional undergraduate business students (e.g., *Bailey, van Acker, & Fyffe, 2012; Wei, Siow, & Burley, 2007*), there is less data about business capstones that are modeled around adult learning theory and used by graduate learners.

Business programs have also implemented experiential learning approaches in their capstones (*Rashford & de Figueiredo*, 2011; *Robinson*, *Sherwood*, & *DePaolo*, 2010), and capstones that use experiential learning have been found to be effective (*Andreasen & Wu*, 1999). One experiential learning approach that helps students deepen their understanding of course content is service-learning (e.g., *Robinson*, *Sherwood*, & *DePaolo*, 2010; *Wei*, *Siow*, & *Burley*, 2007). However, although proven outcomes of service-learning exist, service-learning experiences are used less in the business disciplines than other instructional methods, and the research related to how service-learning impacts the employability skills of business students is scarce, especially in graduate business education (*Wittmer*, 2004).

To address criticisms from business leaders about obsolete educational approaches, the perceived skills gap, and the gap between theory and practice, it is critical that business education prepare students for the workforce by fostering skills needed by employers. The purpose of the dissertation study summarized here was to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstone courses. This study accomplished its stated purpose by answering the following research questions: Are there differences in employability skills developed between MBA students who participate in capstones that include service-learning and comparable MBA students who participate in capstones that do not include servicelearning? Which, if any, essential employability skills, as identified by employers, are enhanced by service-learning experiences in business capstones? Which aspects of service-learning experiences

contribute to enhanced employability skills in graduate business students?

Theoretical and Conceptual Framework

This study focused on service-learning experiences conducted by adult (graduate-level) business students. The following conceptual frameworks were appropriate for the inquiry: experiential learning theory, constructivist theory, and andragogy. Dewey (1938) posited genuine learning comes through experience. Similarly, Kolb's (1984) experiential learning model is a conceptual model that describes the process of experiential learning. The model consists of a four-step cycle that is partially based on the writings of Dewey (1938), who advocated for education that allowed learners to engage in real-world problem-solving. The four stages in Kolb's (1984) model are concrete experience, reflection on the experience, synthesis and abstract conceptualization, and active experimentation. The experiential learning cycle offers a framework for how learning happens when service is combined with reflection.

The dominant modern educational approach to designing instruction is based on the theory of constructivism (e.g., *Bruner*, *1966; Dewey, 1929; Vygotsky, 1978*), and constructivism informs experiential learning theory. Constructivism states that individuals construct new knowledge from their experiences by interacting with other people and the environment (*Fosnot, 1996; Gagnon & Collay, 2001*). Instructors who use constructivism to guide their teaching pose problems that are relevant to students' lives or professions; allow learners to work together to solve problems; help build on prior knowledge; create authentic, real-world learning experiences; and have students reflect on their learning (*Grennon-Brooks & Brooks, 1999*).

Given that this study focused on graduate business students, who are adult learners, andragogy was a final important theoretical framework informing the study. Andragogy is the art and science of helping adults learn (*Knowles, 1984*). It recognizes that adults are unique because they want to know why they need to learn something (*Knowles, Swanson, & Holton, 2005*); are engaged participants in their learning, constructing what they learn as they learn it (*Dirkx, 1998*); need individualized learning so their experiences can foster learning; and are self-directed (e.g., *Dewey, 1938; Knowles, Holton, & Swanson, 2012; Wlodkowski, 1985*).

Research Design, Methods, and Data Sources

The research design was a nonexperimental, comparative, descriptive study. It utilized mixed methods in order to offer various forms of data to address the research questions (*Creswell, 2009*). The study examined students' development of employability skills through their participation in service-learning in MBA capstone courses. In particular, it assessed whether capstone courses that include service-learning influence students' development of employability skills in comparison to capstones that do not include service-learning (*Wickam, 2017*). The quantitative method employed was survey research. Tanyel, Mitchell, and McAlum's (*1999*) survey instrument containing a list of skills prospective employers desired of business graduates was modified for this study and used to test which, if any, skills identified by employers were enhanced by service-learning experiences in business capstones.

Qualitative methods provide an opportunity to enhance the inclusion of participants' voices, which can enrich and help explain quantitative results (*Creswell & Plano-Clark, 2007*). The focus of the qualitative analysis was on the service-learning experiences of MBA capstone students, so survey respondents who indicated that their MBA capstone course included a service-learning project were invited to participate in an interview. Survey respondents optionally included their name and e-mail address if they were willing to be interviewed, and 10 were interviewed by telephone, using a semi-structured protocol.

The sample population included graduate business students who completed a capstone in their MBA program. Participants were sought through professional electronic mailing lists, two Google groups focusing on service-learning in higher education, and seven LinkedIn groups that focus on service-learning in higher education or MBA alumni. Participants were also obtained directly from two institutions at which faculty members shared the research opportunity with alumni from their MBA programs, and both institutions granted Institutional Review Board (IRB) approval.

Data Analysis

Quantitative data collection using a Qualtrics survey occurred over a period of 2 months, and there were 79 usable surveys to analyze. Respondents were asked to indicate the extent to which 19 employability skills were enhanced during their MBA capstone course. The enhancement of employability skills was measured on a scale of 1 (skill was not enhanced) to 7 (skill was greatly enhanced). The analysis involved two steps. The first round of analysis involved looking at each skill separately. A Mann-Whitney-U test, a nonparametric test used for comparing two populations that does not assume the data are normally distributed, was used to compare the scores of Group A (service-learning in capstone) and Group B (no service-learning in capstone). In the second round of analysis, exploratory factor analysis (EFA) was used to determine if factors were present. The EFA provided an opportunity to reduce a large number of variables to a few factors by combining those that were moderately or highly correlated with each other. The qualitative data were analyzed using constant comparative and content analysis methods.

Results

The three skills reported to be enhanced the most during respondents' capstone projects were decision-making (6.71), presentation skills (6.66), and ability to work in teams (6.65). Results of the Mann-Whitney-U revealed a significant difference between Group A (service-learning in capstone) and Group B (no service-learning in capstone) only for presentation skills (p = .003). There was no significance between groups for either decision-making (p = .212) or the ability to work in teams (p = .087).

The results of the EFA (see Table 1) showed that four factors existed on the scale, and they accounted for 73% of the total variance. The Mann-Whitney-U was highest for Factor 1 (44.81) and Factor 2 (36.65). Mann-Whitney-U was performed to compare the scores of Groups A and B to see if there were differences between students who had service-learning in their capstones and those who did not. Results showed significance (at p < .05) only for Factor 1, collaborative learning, suggesting that collaborative learning is enhanced for capstone students who have a service-learning experience more than for students whose capstone does not include service-learning.

Factor Number and Label	Number of Items	Variables	Cronbach's Alpha
Factor I: Collaborative learning	7	Ability to work in teams, interpersonal, oral communications, persuasive ability, presentation, project management, responsibility	.939
Factor 2: Technological and organizational awareness	7	Ability to assimilate new technology, analytical ability, computer problem solving, computer word processing, ethical values, global awareness, punctuality	.848
Factor 3: Timely written communications	3	Accountability, time management, written communications	.899
Factor 4: Making creative decisions	2	Creativity and creative thinking, decision-making	.749

Table 1. Factor Loadings for Exploratory Factor Analysis With Promax Rotation

Results of the qualitative analysis revealed four themes: (1) structure and deliverables of capstone; (2) opportunities to make decisions; (3) opportunities to build teamwork skills; and (4) opportunities to build presentation skills. The first theme, that the structure of the service-learning projects enhanced skill development, is supported by existing literature (see *Bringle & Hatcher*, 1999; *Jacoby & Associates*, 1996). The summative nature of the capstone was an important structural component, and one participant said, "It echoed very much for me the ability to pull the different skills we're learning from the MBA program into one kind of grand-finale course."

Another important structural aspect was that the major instructional method used was client-based. One participant voiced appreciation for the service-focused nature of the project, which allowed her to summarize business knowledge learned during the MBA program for the benefit of the community. Producing deliverables (e.g., written report, oral presentation) for actual use was also an important part of skill development: 60% of participants produced a business plan for their clients. In one case, a team's business plan was going to be used by the client to share with investors because the client was aiming to find new funding sources.

Decision-making and teamwork were two more themes that emerged as key skills gained through service-learning. One participant said, "Decision-making was a huge component for nearly every part of our project, from minor decisions to major ones, individual decisions, group decisions." Decision-making was related to teamwork because decisions were made collaboratively. Teams were able to make progress on and finish their projects when they were successful with communication and accountability, and when they clearly defined their team roles.

Presentation skills, the final theme, were enhanced because so many presentations were required during the capstone project, including a practice presentation to classmates and the professor, and a final presentation to the client. Practicing with classmates and the professor made the presentations increasingly easy to do, because feedback was provided, presenters could correct potential errors, and it offered preparation for the final presentation to the client.

Discussion and Conclusion

Results of the study yielded several key findings. First, there is alignment in the collaborative learning skills needed by employers and those enhanced through service-learning experiences in graduate business capstones. Colbeck et al. (2000) define collaborative learning as "a variety of instructional practices that encourage students to work together as they apply course material to answer questions, solve problems, or create a project" (p. 61). In collaborative learning, small groups share the responsibility for outcomes of tasks and projects. The student experience in a service-learning capstone project enhances several related skills, including the ability to work in teams, interpersonal skills (Gardner, 1983)) and presentation skills. In a large employer survey (National Association of Colleges and Employers, 2014), employers were given a list of job candidate skills and gualities and asked to rate them in order of importance. Ability to work in a team structure and ability to make decisions and solve problems tied as the most important skills, which aligns with the results of this study.

Another key finding is that the instructor's role in structuring and facilitating service-learning in a client-based business capstone project is important to learning. For example, decisions must be made about how teams will be selected. In this study, five out of ten students' teams were self-selected. Bacon, Stewart, and Silver (1999) found that MBA students who self-selected their teams experienced a better team experience than randomly selected teams. In addition, there is some evidence that self-selection motivates students to manage any team conflict more successfully because by self-selecting their teams they are assuming responsibility for them (*Mello*, 1993).

Significance of the Research

The purpose of the study was to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through servicelearning in business capstones. This study adds to the very limited research that exists on graduate business capstone projects and service-learning by demonstrating that collaborative learning and presentation skills are important outcomes of service-learning experiences. Because employers who hire MBAs value collaboration through teamwork (Graduate Management Admission Council, 2016), service-learning should be considered for capstone curricula as a way to achieve that aim. Employers also confirm the need for oral communication skills (The Role of Higher Education, 2012), which can be developed in service-learning courses that provide opportunities to practice giving presentations to real-world stakeholders. The National Association of Colleges and Employers (NACE, 2014) surveyed 250 employers, who rated the importance of certain job candidates' skills/qualities. The employers rated teamwork, decision-making, problem-solving, and verbal communication as the most important skills.

Business schools responsible for aligning curricula with the stated needs of employers can be helped by the findings. These schools need to design programs that best meet the needs of their adult learners, who learn most effectively by engaging in tasks that are experiential and focused on problem-solving (*Fisher, 1985; Knowles, 1987*). Along these lines, the Association to Advance Collegiate Schools of Business, the premier accreditation agency for business programs, asks programs to offer curricula that require active and collaborative learning (*AACSB, 2011*). This study demonstrates that service-learning may offer a valuable avenue for preparing adult learners for the business world, meeting the needs of their future employers, and satisfying standards of practice in the field.

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BOOK REVIEWS

Copyright © 2018 by the University of Georgia. eISSN 2164-8212 Welch, M. (2016). Engaging higher education: Purpose, platforms, and programs for community engagement. Sterling, VA: Stylus. 312 pp.

Review by Lisa Townson

he world is facing increasingly complex challenges, such as climate change, global food security, and social equality. Higher education plays a key role in addressing these, but a diversity of thought, experiences, and knowledge, such as that found when we engage with community partners, will be essential to resolving the most compelling questions. Community engagement efforts have been part of higher education for close to 100 years (Cooperative Extension began in 1914), and the number of campus centers for community engagement began to increase in the early 1980s. However, institutionalizing community engagement and providing high quality support to faculty and students engaged with community partners remains a challenge. In a climate of shrinking public support for higher education, some may question why a university or college should focus on community engagement at all. I would argue that it is more important than ever for higher education to engage fully with off-campus partners to address the most critical and complex issues of our time. Even so, faculty often do not have the skills and resources, students do not have mentors, and community members are puzzled about how to approach higher education to address their needs.

Administrators and leaders in higher education wrestle with ways to support faculty and students in their efforts to work closely with external partners, but most institutions have figured out how to do this on their own. Given that each institution has its own culture, faculty needs, and existing partnerships, best practices in supporting community engagement efforts have been difficult to identify.

In his book *Engaging Higher Education: Purpose, Platforms, and Programs for Community Engagement*, Marshall Welch offers higher education a practical guide to developing and implementing support for community engagement on college campuses. His recommendations are based on theory and on research into successful campus centers and organizations that have collected and presented data on service-learning, civic engagement, engaged scholarship, and best practices for engagement.

The content of this volume emerged from a national study on the infrastructure of campus centers for engagement on campuses that were part of the 361 Carnegie-classified community-engaged institutions. With such a rich set of data about community-engaged practices, officials from colleges and universities that responded wanted to learn the collective results, in order to use what other institutions were doing well to improve their own practices. It is a well-researched handbook for those already running centers and for institutions that would like to start them, as well as for aspiring engaged scholars who want to improve their own practice. Influenced by theory (although not steeped in it), the volume provides a conceptual framework for why and how community engagement—and, in particular, service-learning—has evolved and continues to serve society.

The book draws institutional data primarily from surveys of more than 1,100 Campus Compact members and responses to the 361 Carnegie Classification for Community Engagement institutional applications, resulting in a greater focus on service-learning than on engaged scholarship. Organized into three parts—the purpose (why), the platforms (how), and the programs (what) of community engagement in higher education—this volume includes summaries of faculty development needs, types of staffing in campus centers for engagement, and appendices of readiness inventories and frameworks for assessment.

The purpose of community engagement is described in detail. Welch includes a brief review of events in the history of higher education that, he argues, led to today's understanding of and appreciation for engagement. An entire chapter is devoted to the definition of community engagement. It includes a comprehensive conceptual discussion of community engagement in higher education, from Boyer to more contemporary scholars, like Saltmarsh, Boyte, and Ward. One of my few criticisms of the book stems from the challenges to institutionalizing engaged scholarship caused by confusion about vocabulary. Although it is likely unintentional, the prominence of the words *community engagement* in the title and the book's focus on service-learning and engaged pedagogy may further muddle understandings by promoting the belief that student involvement is a necessary component of all forms of community engagement.

Welch does, however, acknowledge that there are many different definitions for community engagement and provides a useful overview of the different approaches to engagement. Although the entire book is worth reading, the chapter titled "What Is Engagement?" would be a wonderful foundational reading for graduate students or anyone just entering the field of engaged scholarship. The author describes the subtle differences between civic, community, and democratic engagement and covers several definitions of engaged scholarship. Tying early calls from the Kellogg Commission for campuses to become engaged institutions to various campus initiatives and the current Carnegie classification for community engagement, Welch describes what it means to be an engaged campus. To summarize, these definitions include the following tenets:

- performs academic/scholarly work for public good;
- includes forms of teaching, research, and service, but always includes academic expertise and methodology that is grounded in scholarly work;
- not only draws on academic expertise, but also reflects community knowledge and expertise.

Welch pays particular attention to engaged pedagogy and epistemology, describing various forms of experiential education in comparison to community engagement. Drawing on Campus Compact data and exemplar programs, the author not only makes a clear and compelling case for engaged pedagogy in undergraduate programs, but also provides key principles and examples of highimpact practices. He also includes examples of faculty development curricula in service-learning and provides an overview of community engagement from the undergraduate student's perspective.

The section on platforms focuses on systems and infrastructure. This description of the financial, human, and facilities resources required for institutions to adequately support community engagement is well done and quite practical. I find the descriptions particularly helpful for institutions that are either building new community engagement offices/centers or reorganizing existing ones. The section is informative about what various institutions have done and offers a summary of the kinds of support that are necessary to advance engagement across service-learning and research missions. In addition to its practical descriptions, the book also explores how academic and institutional culture affect a campus's ability to institutionalize engagement—across leadership, faculty, and community members.

Shaped by purpose and platform, engagement programs are developed and implemented differently at all institutions. With sources ranging from small to large institutions, this book provides examples of program development activities, including capacity building, leadership development, recognition and celebration, resource development and sharing, and strategic planning. The detailed description of important components is thoughtful and useful. From examples of what books and periodicals should be included in a campus engagement resource library to descriptions of quality faculty development, data-driven practices are carefully described.

Although one of the most important tenets of communityengaged scholarship is reciprocity with partners, few universities have addressed the need for preparing and training partners in various essentials of campus-community engagement: identifying potential faculty partners, understanding institutional policies such as human subjects protection and sponsored project administration, and advocating for their own needs as part of a joint project. The inclusion of training and educational resources for partners on how to work effectively with campus faculty and staff is a refreshing addition to the literature, highlighting the need for memorandum of understanding (MOU) development and assessments of relationships. However, most of the examples provided describe best practices in the context of service-learning.

Perhaps the most useful part of this book is a detailed description of campus engagement center requirements for infrastructure and resources, not just in a theoretical sense, but also in a very practical way. In addition to discussing the need for paid staff and optimal location of a physical office, the book even suggests roles and responsibilities for directors and other staff. Further, Welch provides data from the Carnegie classification applications describing all types of staffing needs for engagement centers, including administrators, advisory boards, and development staff. He presents a fairly comprehensive array of services that campus centers provide and even reports average annual operating budgets.

This book is written in very accessible language and would be helpful for institutional leaders involved in engagement activities on their campuses as well as faculty and graduate students in higher education. Written much as a guide with best practices, it describes building campus support structures for engagement, faculty development approaches, risk management, assessment, and support services. The appendices include useful tools that can be adapted and used to facilitate discussions between faculty and community partners and to assess institutional readiness for community engagement.

The volume has a clear focus on service-learning, and it offers a much more comprehensive discussion of the theory of engaged pedagogy than of engaged research/scholarship. Given the existence of a more developed literature on service-learning and pedagogy, the book would achieve a higher level of usefulness if it focused equally on engaged research/scholarship. Research, Actionable Knowledge, and Social Change: Reclaiming Social Responsibility Through Research Partnerships (St. John, 2013) is an example of a good reference on engaged research that provides the type of coverage missing in this volume. Similarly, organizations that are less focused on service-learning and support a wider range of community engagement, including engaged research and scholarship, are not highlighted in this volume to the same degree as service-learning organizations such as Campus Compact and the International Association for Research on Service-Learning and Community Engagement (IARSLCE). For example, the Engagement Scholarship Consortium (ESC) began 18 years ago (as the National Outreach Scholarship Conference), and today its members consist of private and public colleges and universities from the United States and the rest of the world. In addition to hosting an annual conference, the ESC promotes a unified research agenda in engaged scholarship. The organization's goal is "to work collaboratively to build strong university-community partnerships anchored in the rigor of scholarship, and designed to help build community capacity" (Engagement Scholarship Consortium, n.d., para. 1).

Engaging Higher Education is a wonderful and pragmatic resource that presents meticulously collected data from a wide range of institutions of higher education. This is a "how-to" manual for running a successful center focused on service-learning, though many of the recommendations and practices would benefit an office focused solely on engaged scholarship. From soup to nuts, this book addresses the human and financial resources required, practices that achieve impact, and, perhaps most critical, the theoretical basis for why these practices are necessary for success. It is a must-have resource for anyone running a college or university center for service-learning and academic leaders who want to build stronger support for these initiatives.

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 Benson, L., Harkavy, I., Puckett, J., Hartley, M., Hodges, R.A., Johnston, F. E., & Weeks, J. (2017). Knowledge for social change: Bacon, Dewey, and the revolutionary transformation of research universities in the twenty-first century. Philadelphia, PA: Temple University Press. 190 pp.

Review by Chris R. Glass

ur nation and world face unparalleled social, political, and economic pressures that hold transformative potential. Conversation about the future of research universities is in need of bold visions equal to such a moment. Knowledge for Social Change: Bacon, Dewey, and the Revolutionary Transformation of Research Universities in the Twenty-First Century offers a bold vision for democratically minded academics concerned about our nation's future. The authors invite the reader to join a crusade to realize Dewey's vision for participatory democracy through the work of America's research universities. The authors, who are among the stalwarts of the modern community engagement movement, make no secret that the book's intellectual and political projects are meant to be provocative. Some readers may greet their provocations as utopian wishful thinking, but the authors make clear that their vision is serious and practical. Their earnestness and commitment to the transformation of research universities should prompt even the most skeptical reader to consider the radical project they propose.

In the book, the authors outline an ambitious intellectual project. The book represents a seminal scholarly contribution to the modern-day community engagement movement as the most comprehensive account to date of the philosophical ideas that ground it. The authors highlight key ideas from this intellectual tradition from Francis Bacon, who envisioned the advancement of knowledge as contributing to "the relief of man's estate," to John Dewey, who envisioned community schools as social centers that serve all members of the community. Importantly, they seek to address what they see as a significant omission in Dewey's work on education: the role of the university as the fulcrum on which the schooling system might be transformed. To this end, in accord with the political project outlined in the book, the authors outline a bold intellectual vision: "to construct a comprehensive, democratic, practical-theoretical approach that would free Western thought and the institutions of Western societies from Plato's 'dead hand,' an approach that would, in our term, 'de-Platonize' their social, political, and educational systems" (p. 49). The authors see themselves as heirs to this democratically minded intellectual tradition and pay special attention to the contradictions, conundrums, and practical issues that led past projects not to live up to their promise.

On this foundation, the authors outline an ambitious *political project* "to radically transform the research university to *radically advance the advancement of learning and knowledge*," arguing that "such a movement . . . is both possible and capable of producing and *implementing* the knowledge needed to enable all human beings to enjoy long, healthy, active, peaceful, virtuous, and happy lives" (*p. xii*). The authors recognize that some readers may greet their thesis as bold rhetoric but not a serious proposal, so they make clear: "Are we suffering from a bad case of delusionary utopianism? Obviously, we do not think so" (*p. xii*). The key tension for the remainder of the book is whether the authors persuade readers to join them in their crusade.

The book is organized into two major parts. Part 1 (Chapters 1–5) explores the intellectual history of community–university engagement. The first five chapters discuss intellectuals who offered a radically transformed vision of higher education in their respective historical eras. Part 2 (Chapters 6–10) describes the neo-Deweyian rationale for the Netter Center for Community Partnerships at the University of Pennsylvania. The book concludes with an imperative to radically transform research universities. After outlining and assessing the central argument of the book, I will discuss the book's contribution to the literature on community engagement.

In the first three chapters, the authors highlight Francis Bacon's belief in human beings' unlimited capacity to advance learning for the betterment of the human condition-what Bacon termed the "relief of man's estate." Bacon argued that the "old regime of knowledge," in which individuals worked in isolation, needed to be replaced with new regimes of organized groups who work together for the betterment of the human condition. Likewise, Benjamin Franklin envisioned universities as institutions that would develop citizens with the knowledge, skills, and attitudes to "do good," where moral and intellectual aspects of learning would be intertwined. Franklin postulated that the schooling system was the "strategic subsystem" of society, emphasizing the pragmatic, economic benefits of the University of Pennsylvania to the city of Philadelphia. Universities were a means of social mobility for all people, not just institutions, for producing gentlemen from a handful of upper-class students. The authors go on to highlight a series of Progressive Era projects, including Jane Addams's Hull House, as well as the visionary leadership of university presidents

William Rainey Harper (University of Chicago) and Seth Low (Columbia University). They pay particular attention to issues of sustainability and explore reasons why some of these Progressive Era projects did not live up to their promise. The authors take care to commend universities' efforts to engage the central problems of their cities, but highlight how some efforts were tainted with a noblesse oblige that lacked the mutuality of the vision these institutions put forth.

In the fourth chapter, the authors begin to build their case for a neo-Deweyian vision for community engagement. They note a significant gap in Dewey's work: *the lack of focus on the role of universities*. They also do not hesitate to highlight contradictions in Dewey's efforts to promote progressive education, pointing out that his Laboratory School was a scientific laboratory isolated from what children experienced outside school. They assert that while this *specific* solution was "scholastic, academic, impractical, and unrealistic" (*p. 54*), Dewey's *general* theories, appropriately applied, have the potential to radically transform the university and schooling more broadly. They believe Dewey's emphasis on reflective and strategic aspects of real-world problem-solving is the most effective means to develop the intelligence not only of individuals, but of entire communities.

The fifth chapter provides a lucid and comprehensive account of the modern community engagement movement that is essential reading for anyone involved in it. The authors trace the long hibernation of university civic engagement after the end of the Progressive Era, followed by the social and political conditions that led to its reawakening in the 1980s. They trace events from the creation of Campus Compact (1985), to the Wingspread Declaration on Renewing the Civic Mission of the American Research University (1999), to the more recent publication of A Crucible Moment: College Learning and Democracy's Future (2012). The authors do not shy away from citing recent controversies, including what they term the "crisis of purpose" within the service-learning movement, when disciplinary pedagogical rationales began to rival the democratic and civic purposes of service-learning (p. 79). They argue, "The higher education democratic civic and community engagement movement emphasizes that collaboration inside and outside the academy is necessary for producing knowledge that solves realworld problems and results in positive changes in the human condition" (p. 69). This chapter's historical account illustrates how the community engagement movement continues to adapt as it seeks to achieve its aims.

In the sixth and seventh chapters, the focus shifts to the neo-Deweyian roots of the Netter Center for Community Partnerships and its link with West Philadelphia. The authors outline academically based community service (ABCS) and university-assisted community schools (UACS) as two key strategies behind the Netter Center. The West Philadelphia Improvement Corps (WEPIC), which emerged from an undergraduate seminar led by Benson and Harkavy in 1985, provides the intellectual underpinnings of what is known now as ABCS. For the authors, ABCS is similar to service-learning in that it takes places in a credit-bearing course and involves service activities that are identified with community partners. However, ABCS is rooted in community service and integrated with research, teaching, and learning designed to advance the systemic improvement of the community. It has a "strategic focus on the local manifestation of universal problems" (p. 101) and mobilizes various disciplinary perspectives to understand and act on these problems. Moreover, ABCS aims at the long-term structural improvement of the community, not the immediate alleviation of individual suffering or for the future benefit of an individual student. Benson et al. envision their work at the Netter Center as a "university-wide, community-wide, communal" (p. 105) participatory action research project. For the authors, it is this focus on communal that differentiates the approach from others; it promotes genuinely working with and for the community through ongoing planning and project implementation. A careful reading of the first six chapters usefully unpacks the neo-Deweyian rationale for the work of the Netter Center.

The authors argue for "locally rooted" change that is part of a national and global movement in their final three chapters. They describe the regional, national, and global initiatives of the Netter Center. They also return to their central thesis: that research universities are part of the problem and must radically change their institutional cultures and structures. At the heart of their argument is a proposal for a "democratic devolution revolution" that involves the investment of government funds for universities to create strategic, sustainable partnerships. To be clear: governments would be second tier to other entities, such as universities, voluntary associations, faith-based communities, children and their parents; governments would be less focused on delivery of services and instead would fund community-university partnerships. The chapter ends with a call to "democratic-minded academics to create and sustain a global movement to radically transform research universities" (p. 148).

One of this book's most important contributions is the authors' simultaneous retrospective and prospective account of the community engagement movement. It provides a valuable intellectual grounding for any serious-minded academic or graduate student with an interest in community engagement or service-learning. The authors use accessible language throughout the book with anecdotes that allow readers to draw their own conclusions about the implications for research, engaged scholarship, and society. That said, the authors make no secret that their radical vision for transforming higher education is meant to be provocative. Thus, the book's historical account of community engagement would provide a strong intellectual foundation for lively, serious-minded discussion in a faculty learning community or graduate seminar. It could serve as a basis for participants to draw out the implications of provocative issues and questions the authors raise throughout the book.

A major strength of the book is its well-developed neo-Deweyian vision for community engagement represented in its discussion of the design of the Netter Center. It is clear the authors believe Kurt Lewin's dictum that "there is nothing as practical as a good theory." Readers will come away with a clear sense of the rich theoretical basis for the work of the center. The book's call for a "devolution revolution" is a fitting climax; however, it also raises questions. In the contemporary policy and fiscal context, I am skeptical that state and federal governments would support the vision the authors put forth. It would likely take nothing short of a new Progressive Era for the government to support the authors' proposal. Further, this and other calls for the transformation of research universities continue to be dogged by the usual suspects of "institutional inertia" (*p. 31*), including a faculty rewards system that remains slow to recognize and reward engaged scholarship.

The book's description of the 30-year evolution of the Netter Center illustrates the reality that transformation requires slow, sustained work—and a bold vision. Transformation is not instantaneous; it is best viewed within the long arc of history. The central contribution of the book may be the assertion it makes that our nation and world exist in a moment of transformative potential. *Knowledge for Social Change* is a book for such a time, largely because it takes our work out of "the moment" of a particular day, year, or decade and places it in the context of centuries. In so doing, the authors make their case: History demonstrates that the transformation of research universities is achievable, but not without bold vision and concrete action.

About the Reviewer

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Stoecker, R., Holton, N., & Ganzert, C. (Eds.). (2017). The landscape of rural service learning, and what it teaches us all. East Lansing, MI: Michigan State University Press. 230 pp.

Review by Nancy Franz

ommunity-engaged scholars know that understanding the community context is critical for successful communitybased learning that results in community development. As a rural-focused and mostly rural-based educator, I've been surprised at the lack of attention over the decades by universitycommunity engagement scholars to the characteristics, opportunities, challenges, and impacts of rural service-learning. The Rural Alliance for Service Learning has attempted to address this gap in the literature by publishing this 19-chapter anthology of interesting experiences, research, and insights about service-learning in rural America with a predominant focus on the upper Midwest.

The book is divided into sections on rural service-learning context, practice, and the future. As with many publications about university-community engagement, the publication gives deep attention to practice stories and lessons learned from those experiences. This approach will appeal to service-learning practitioners looking for tips and tools for improving their work with students and communities. However, the chapters of this anthology offer a strong variety of differing institutions, disciplines, perspectives, experiences, and approaches to rural service-learning. This diversity provides valuable insights about rural life, service-learning, research on rural service-learning, and community engagement for sociologists, educators, service-learning researchers, community engagement scholars, and higher education administrators. Even though none of the authors write from a rural community perspective, community partners may find useful ideas, practices, and insights for communities interested in working with students and higher education institutions to bring about local change.

The title of the book led me to expect that each chapter would fully address the intersections of rural life, service-learning, and important insights for the future. However, some chapters fail to fully situate the case or work within the rural context or delineate the specific learning processes or outcomes for students. Chapters often provide interesting research questions or practice stories but fail to answer the "so what?" question about what we all can learn from authors' experiences. This lack of attending deeply to all three elements of the title (rural, service-learning, and what we all can learn) may stem from the lack of a consistent definition of "rural" and "service-learning" used across the volume or the goal of providing a very comprehensive overview of the topics. However, the introductory and concluding chapters do a nice job of addressing all three aspects of the title by setting the stage for service-learning in a rural context and providing a summary and future suggestions for this work.

It might have been more appropriate to title this book It's All About Distance: Why Rural Service Learning Is Invisible but Important for Us All. The main theme spanning all the chapters about what makes rural service-learning unique is "distance." Authors provide research and multiple examples of physical, cultural, and resource distance and how it deeply shapes rural servicelearning. Distance is documented as negative when creating transportation challenges and a disconnect between urban and rural norms and values. On the other hand, distance is seen as beneficial when creating less formal structures and cultures to more quickly, efficiently, and fully engage with service partners and beneficiaries. Faculty, students, and community partners must serve as boundary spanners between rural life and urban institutions for successful service-learning outcomes. In fact, the authors believe rural service-learning can have greater impact than service-learning in urban areas due to unique characteristics of rural life.

The authors provide a comprehensive variety of lists and tools for successful service-learning, including specific characteristics unique to rural life; six service-learning principles and questions to be addressed with community partners; detailed processes for creating, implementing, and evaluating rural service-learning projects; guidelines for one successful rural service-learning project; a list of rural service-learning best practices related to geography, faculty, and students; and a list of considerations and cases related to reducing risk in rural service-learning. My favorite tool describes how to enhance rural service-learning using the Medicine Wheel to integrate Native American culture into project planning, implementation, evaluation, and reflection. Several authors also provide lists of significant questions to be explored by future research.

Most importantly, this book builds on previous literature and practice by suggesting that rural service-learning could inform an improved model for service-learning more broadly—one that provides a balance between learning and community development. The authors believe practitioners (and I also suggest researchers) need to reexamine the ways they work with communities to create approaches adapted specifically to fit rural or urban cultures, rather than assuming that one approach works across contexts. They suggest that rural service-learning, to be successful, must be primarily focused on community gain with student service as a method rather than the primary outcome. Success will be more evident for those focused on building trust and relationships with rural communities through individuals and networks, rather than through formal agencies and organizations found more often in the urban context.

This volume is a welcome and much needed addition to the book series *Transformations in Higher Education: The Scholarship of Engagement* sponsored by the National Collaborative for the Study of University Engagement at Michigan State University. It clearly articulates the joys and challenges of rural service-learning, adds to previous research and best practices about service-learning, and provides a suite of promising practices and further research questions that will continue to help service-learning improve community life. Urban-located service-learning researchers and practitioners should also look to rural colleges for best practices for working with rural communities rather than working in, at, or for rural communities.

I challenge the authors of this book and others who value service-learning to continue to articulate why rural service-learning is important to everyone, not just the institutions and communities it serves. I'd like to see the title of this book become a strong reality—that we all learn from rural service-learning to make life better for everyone.

About the Reviewer

Nancy Franz is a professor emeritus in the School of Education at Iowa State University in Ames, Iowa. She has written and presented widely on community-engaged scholarship and Cooperative Extension. She received her Ph.D. from Cornell University.