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Civic Learning through Public Scholarship: Coherence among Diverse Disciplines

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This article presents three cases of community-engaged, or "public," scholarship across diverse disciplines (social science, natural science, and health science) in which the rigid boundaries of what has been conceived as traditional service-learning have been blurred. The innovations represented within these cases explicitly address discipline-specific knowledge and civic skills acquisition. Moreover, they do so in ways that encourage the integration of scholarship, service, teaching, and learning. We argue that civic learning can be authentically realized through the synthesis of disciplinary content and civic sensibilities; integration of teaching, learning, research, and service; and by organizing our efforts around community problems (rather than organizing around specific pedagogical or research methods).

Recently, a number of civic learning frameworks have been disseminated in the hopes of arming higher education to revitalize the civic skills, knowledge, and dispositions of its students (Adelman, Ewell, Gaston, & Geary Schneider, 2011; The National Task Force on Civic Learning and Democratic Engagement, 2012). According to the Framework for Twenty-First-Century Civic Learning and Democratic Engagement (National Task Force, 2012, p. 4), students can acquire civic learning1 that includes the development of civic knowledge, skills, values, and capacity for collective action with or without engaging larger publics. However, these frameworks position collaborative work with the community as a uniquely effective way to develop civic habits and skills. The role of real-time engagement with communities has long been understood as a desirable pursuit, but the purpose of this engagement has shifted over time. This can be most clearly seen in the adoption of service-learning² across American higher education.

According to the pioneers of service-learning (Stanton, Giles, & Cruz, 1999), the pedagogy was first formalized in the late 1960s to harness the learning in community action and activism. Its originating values set promoted attention to issues of justice and social policy. Early

faculty adopters were often marginalized, seen as contrary to community and university culture, and in some cases utilized the pedagogy in spite of institutional resistance. As service-learning gained wider acceptance through curricular reform and the boom of volunteer initiatives, university-wide programs were established to scale-up the learning and community benefit to encompass large swaths of students and community participants. In some instances, service-learning gained legitimacy as a vehicle for disciplinary learning, but its critical and political stance was weakened. This evolution is lamented in work on democratic engagement: Saltmarsh, Hartley, and Clayton (2009) propose that the civic engagement movement has been stalled because institutions of higher education adopted community engagement programs and activities devoid of democratic purposes (as characterized by inclusive and collaborative work on public problems).

The purpose of this article is to illustrate the civic learning gained through public problem solving. We argue that preparing students as engaged and active citizens who are able to draw upon disciplinary skills to enact change is possible through community-engaged scholarship. We offer that key to civic learning is the synthesis of disciplinary knowledge and civic sensibilities; integration between functions of teaching, research, and service; and positioning of diverse stakeholders and perspectives as a means to frame the public problems that are central to the teaching and scholarship undertaken.

Consider these engagement scenarios:

> *Scenario A*: College students enrolled in an educational theories class tutor children at a local after-school program and reflect on their experience as part of their coursework. Their reflections respond to a series of prompts asking them to use examples from their tutoring experiences and observations of the after-school program setting to inform their understanding of differentiated instruction, holistic student development, and an array of curriculum theories.
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> *Scenario B*: College students enrolled in a class on social justice in educational settings are introduced to a neighborhood in which the community schools have been closed as part of a redistricting plan. Children are bussed to eight different schools outside of their community. After meeting an array of youth, parents, community leaders, and teachers within the schools the children attend, the students learn that parental involvement in the new schools is rare. The students work with a coalition of community groups to research non-traditional models of parental involvement and collaborate with parents and teachers to launch a

> program in which teachers from the new schools begin to come into the community twice a month for the purpose of sessions with parents. The students are asked to use examples from this project as part of their reflections on the social and economic impact of school closure in urban communities, theories of collaborative educational leadership that emphasize community-school-family partnerships, and educational achievement models.

These two scenarios represent engagement with the community and disciplinary learning through community experience. In both instances, the community participants benefitted: Children received tutoring and parents were able to access their children's teachers. The scenarios differ, however, in the degree of civic learning and action that was made accessible to students (and arguably to the community participants). Scenario B portrays a model of engagement that was collaborative, or co-constructed: Diverse stakeholders addressed a public problem rather than providing a pre-determined service.

At minimum, community-campus engagement should be an experience for students (and faculty) to understand the link between what Mills (2000) called the private troubles of a milieu and the public issues of a social structure. For Mills, "troubles" were the personal problems faced by individuals on a daily basis while the term "issues" referred to the large-scale social maladies that affected whole categories of people. Understanding the connection between private troubles and social issues is at the core of what Mills called the sociological imagination. Consider Scenario A: The student in this example gained valuable real world experience vital to understanding his coursework. However, there is nothing in this case that places these theories in the larger social context (i.e., educational policy, family issues, or advantages/disadvantages related to race and economics).

In the second scenario, students begin by addressing issues of educational policy (i.e., which schools are closed) and family dynamics (i.e., lack of parental involvement). This, in itself, could serve as a moment where students cultivate their sociological imaginations. However, in this case, students move beyond simply understanding the link between the public issues and private troubles. In this scenario, they actually collaborate with various stakeholders (i.e., parents, children, teachers, and community leaders) in order to address the problem. In this example, academic learning translates into collaborative scholarship, community activism, and neighborhood-level development.

In circumstances where community engagement, such as service-learning, has been programmatically scaled and standardized to involve large groups of students, faculty en masse must be tapped to adopt the

pedagogy. These faculty have widely diverse (and perhaps unexamined) objectives for engaging larger communities within their students' learning, inclusive of content knowledge conveyance, initiating cognitive dissonance, building intercultural capacity, and fostering activism (Butin, 2007). These faculty members also have widely diverse values and skills with regard to collaboration and familiarity with public issues, or problems. For example, at Duquesne University located in Pittsburgh, Pennsylvania, a robust service-learning program is part of the undergraduate core curriculum. All undergraduates must take at least one class in which service-learning is the major pedagogy (approximately 2,000 students per academic year, across 85 course section offerings, taught by 50 faculty). The class must comport with a set of criteria that encourage academic rigor, reflection, and reciprocity with community. For these classes, faculty members typically develop service experiences with their chosen community partners to ensure meaningful involvement of students in the community agency setting and to bring to life course concepts. It is less common to find examples in which the design process includes students as co-constructors alongside community partners and faculty or instances in which research and scholarship on public problems are integrated with student learning and faculty service. These instances are indicative of creative community-engaged scholarship that pushes against a standardized program and is organized around a public problem rather than a specific pedagogy or research method.

This article puts forward three cases of community-engaged scholarship across diverse disciplines (i.e., social science, natural science, and health science) in which the rigid boundaries of what has been conceived as traditional service-learning have been blurred. The innovations represented within these cases explicitly address civic learning as a synthesis between acquiring civic skills and discipline-specific knowledge. Moreover, they do so in ways that encourage the integration of scholarship, service, teaching, and learning. They employ student, faculty, and community partner collaborations that that address community problems. As a result, their innovative and unique designs challenge the status quo of academia. We use the language of "problems" not to intimate a deficit approach to community work, but to signal the distinction between providing traditional community service and developing co-constructed solutions to social and environmental issues. This terminology parallels Mills' (2000) private "troubles" and "public" issues. While each case is a unique configuration and represents a distinct discipline, coherence is found within these diverse cases by presenting their shared attributes and outcomes. The article concludes by asserting that civic engagement can be authentically realized through the integration of teaching, learning, research, and service and by organizing our efforts around community problems (rather than organizing around specific pedagogical or research methods).

Disciplinary Case Studies

Case #1 Criminal Justice Policy Inside-Out

Civic problem. In the social science case presented here, students address issues of crime and public safety. The United States incarcerates a larger portion of its civilian population for the purpose of crime control than any other nation in history (Reiman & Leighton, 2012). Despite the monumental resources devoted to policing and corrections, urban communities of poor minorities frequently experience crime as a major detriment to overall quality of life (Alexander, 2012).

Opportunity for discipline-specific learning. Teaching in the fields of sociology and criminology, it is essential to find a connection between course material and the lived experiences of students in order to make classes more captivating and encourage a higher level of scholarship. From this perspective, a policy course entails an inherent obstacle: Students, at least at the undergraduate level, often find policy abstract, complicated, and boring. In order to be effective, course content must appeal to students by keeping the reality and significance of criminal justice policy at the forefront of their minds throughout the semester. Additionally, the American Sociological Association (2005) recommends that in academic programs where sociology and criminology are jointly housed, the curriculum provide opportunities for students to think critically, explore human behavior and diverse cultures, and communicate well in oral and written forms. In this case, students participated in a dialogue about crime and justice with incarcerated men within a correctional setting. These men offered dynamic insight into the culture of street, as well as the carceral experience. Through the development of policy, students had the opportunity to integrate critical and analytic thinking, develop understanding of other cultures (such as street and carceral), and communicate in various forms.

Project description. This case of community-engaged scholarship came from the convergence of a number of research, service, and pedagogical opportunities that arose in a single summer that led to the redesign of a seminar, Criminal Justice Policy.

During a research trip to Wilmington, Delaware, faculty and students from Duquesne University and West Virginia University piloted a study on the impact of civic engagement on urban crime3. After semesters of reading about these kinds of projects, students were excited to take part in actual research and have a stake in its success. Serendipitously, the professor had just accepted a service commitment in the City of Pittsburgh Mayor's Safe Neighborhood Cabinet that brought with it the possibility for the seminar to focus on crafting a policy proposal to be presented directly

to the Mayor. Further, just a few weeks prior to the Wilmington trip, the professor had completed Inside-Out instructor training4, which promotes a pedagogical model grounded in civic engagement.

Based upon this experience, the professor decided to reformat the next session of his Criminal Justice Policy seminar to feature particular design choices, including the location of the class, adoption of Inside-Out pedagogy, and focus on policy. The professor chose to locate the class within a prison. The professor anticipated that the incarcerated men taking part in the course would have very different perspectives on crime and urban environments than those of the politicians, police officials, community organizers and academics usually engaged in this discourse. Bringing their voices into the discussion would be a valuable contribution to the ongoing debate. The course featured Inside-Out pedagogy with the end product being policy recommendations. Students enrolled at Duquesne University ("outside students") and incarcerated men ("inside students") collaboratively addressed a set of policy issues in criminal justice that began with questioning the role of policing in society and then moved on to the importance of community development as well as civic engagement in crime prevention.

Discipline-specific learning outcomes. In sociology courses, students are confronted with material in the forms of text or film that is geared to evoke a strong emotional response. In this case, the professor intentionally shifted the learning experience from mediated experience to lived experience so that the learning would take hold in the students' minds with greater depth and gravity. The ASA lists twelve central learning goals for sociology majors (McKinney et al., 2004). This policy seminar organically challenged students to achieve most of those goals. Of note, two are most strongly represented: "student[s] will be able to define, give examples, and demonstrate the relevance of culture; social change; socialization; stratification; social structure; institutions; and differentiations by race/ethnicity, gender, age, and class," and further should be able to consider the "internal diversity of American culture" (p. 52).

From the very beginning of the course, students saw firsthand some of the more extreme consequences of social structure and stratification. As one would expect, the outside students had some basic fears about entering a prison and taking a class with a group of incarcerated men. As one might not expect, so did the incarcerated men. All of the anxiety the class generated was rooted in issues of race, class, gender, and age.

The sixteen inside students in the seminar comprised the academic elite of the institution. They all had high school degrees and were pursuing further education from vocational training and community college degrees to bachelor's degrees offered by major universities through distance learn-

ing programs. A big part of their identities was based upon being students; they were apprehensive about the prospect of competing with university students in a "real" class. Furthermore, even for those who were not feeling intellectually threatened, there was a sense that the outside students would be studying them or that it was all some sort of experiment.

From the first meeting of the seminar, the class seating arrangement was designed to address and assuage these concerns. In the classroom, chairs were arranged in a circle and inside and outside students were instructed to sit in alternating seats. This prevented either group from clustering along institutional lines. Next, the class moved into a series of "ice breaker" activities that relieved the significant tension between the two groups. Later, students from both groups commented that by beginning with these types of activities they were able to more or less forget about their statuses and proceed as if they were all just part of a regular college course. Moreover, during separate debriefing sessions, each group was asked to reflect upon and discuss what they were feeling during the initial interaction. These sessions provided an opportunity for students to make connections between their emotions and the larger cultural issues.

The other opportunity to achieve the ASA learning goals was presented as a final project, discussed below in the "civic learning outcomes" section. For this project, the class worked as a whole, as well as in subgroups, in order to understand and offer potential solutions for public safety at the neighborhood level. Given this overlap in discipline specific and civic learning, the following section will also address how the project facilitated ASA goals.

Civic learning outcomes. The resulting civic learning captures many elements represented in the 21st Century Framework for Civic Learning and Democratic Engagement (National Task Force, 2012), as denoted by the italicized words that follow.

The most tangible indicators of civic learning were found in the students' policy proposal. The final product focused on six policy areas chosen because of their potential for cultivating neighborhood safety by engaging the community. This strategy was selected through a combination of what the students learned from the basic course material as well as what the inside students had to contribute based on their own experiences with crime and the criminal justice system.

Here, the inside students were able to use their collective personal histories as a filter to sort out the theories and policies that held the most potential. This effort demonstrates the fulfillment of the sixth ASA learning goal to:

> (a) show how institutions interlink in their effects on each other and on individuals; (b) demonstrate how social change factors such as population or urbanization affect social structures and individuals; (c) demonstrate how culture and social structure vary across time and place and the effect is of such variations, and (d) identify examples of specific policy implications using reasoning about social-structural effects. (McKinney et al. 2004, p. 52)

The policy proposal required students to understand the links between the numerous institutions at work in urban environments. The quality of this project resulted directly from an unparalleled exposure to the realities of crime and justice. The students' successful development of policy that harnessed these realities, theoretical material, and personal histories demonstrates acquisition of particular civic knowledge: knowledge of *diverse cultures, histories, values, and contestations* that have shaped US incarceration. It also illustrates students' civic skills, which include *critical reasoning, gathering and evaluating multiple sources of evidence, deliberation*, and *collaborative decision-making.*

Second, the foci of the proposal reveal that the students were moved from apathy to activism because each of the policy suggestions included a role for Duquesne University students as well as formerly incarcerated men. Here students demonstrate their understanding of their *responsibilities to a wider public*. The outside students were very savvy in constructing mechanisms such as service-learning projects and internships where students could take part in progressive justice and community building initiatives as part of their education. Students' *integrated* various *knowledge, skills, and values* so that they could develop *strategies to take concerted action* together. Additionally, the inside students came up with a variety of interesting ways in which those who have left the culture of street crime could work towards its elimination. The technique that stands out the most involves working to help facilitate victim-offender conferences as part of the restorative justice movement5. This is another instance where the civic learning outcomes and discipline specific learning come together. It is directly linked with the ASA learning goals "to think critically, such that the student will be able to: present opposing viewpoints and alternative hypotheses on various issues; and engage in teamwork where many or different viewpoints are presented" (McKinney et al. 2004, 52). As observed above, both sets of students building a policy proposal that benefited from the unique experiences of each set of students.

While the policy proposal was an excellent piece of work, it only begins to express what was felt during the course of the seminar. Specifically, the consequences of the context for the outside students' selves were

observed in such simple things as negotiating entry into the facility. Admission is so tremendously complicated and frustrating that, as students processed through it for each meeting, it taught them something fundamental about prison life6. Likewise, for the inside students, the experience of being part of a college course and interacting with a group of outside students was totally contrary to their larger prison experience. The experience provided an opportunity to *develop empathy and mutual respect* for one another.

It was obvious to all involved that students were changed over the course of the semester. Post-course evaluations were conducted through a series of open-ended questions. Both sets of students noted the value that the course had for offering them the opportunity to learn from the very different perspectives represented in each of the student populations. A favorite example involved a sophomore named Rob who was very focused on pursuing a career in law enforcement. Though still a student, he conformed flawlessly to most police stereotypes. As a result, the inside students nicknamed him "super cop." What was striking about this was that, though the inside students were biased against the police, they talked openly about how much they liked Rob while they were teasing him for his cop qualities. Moreover, when surveyed about how the course had changed him he replied:

> One of the biggest changes that has happened as a result of this class is the realization that criminals are not all horrible people. One point that really stuck with me was the fact that these criminals are all being defined by one of the lowest points in their life, and this will follow them around for the rest of their life. Many of the men that I met were genuinely good people who made a mistake or two. Coming in to this experience I have to admit that many of my ideas about criminals were perpetuated by the media and were almost all incorrect. I feel that inside out has changed me by deepening my respect for a segment of society that I may have had little or no respect for in the past; those who have committed crimes.

This response offers the possibility that when Rob joins the police ranks, he will be somewhat less likely to fall in the "us vs. them" mentality that so pervasively plagues that culture. This *open-mindedness and ability to understand one's own assumptions* informs the development of civic professionals, a forward-looking goal of civic learning. Another response that is equally striking came from an otherwise cynical inside student named Kirk, who when asked what he would take from the class, simply replied, "HOPE?"

Case #2: Application-Based Service-Learning in the Natural Sciences.

Civic problems. In the natural science case presented here, students worked on multiple civic issues, two of which are highlighted: the potential public health threat caused by unmanaged feral cat populations and environmental problems caused by acid mine drainage resulting from abandoned coal mines. Feral cat (non-owned or wild cats) populations are estimated to rival those of owned pet cats at more than 70 million across the United States. Among the public concerns associated with feral cat populations are a variety of zoonotic diseases including rabies, bartonellosis, and toxoplasmosis (Luria et al., 2004). Without appropriate population management (such as trap, neuter, and return programs), these feral populations continue to grow as does the practice of euthanasia. Acid mine drainage is also an environmental and public health problem, especially in post-industrial, river-abundant areas of Pennsylvania such as Pittsburgh. Water draining from abandoned mines is sulfur-rich, often extremely acidic, and contains elevated concentrations of metals. When mines are closed and abandoned, the acid mine drainage seeps into the water table, polluting the groundwater and surrounding streams and reservoirs, sometimes to catastrophic levels (Johnson & Hallberg, 2005).

Opportunity for discipline-specific learning. Traditionally, science education has focused on content distribution. With the explosion in scientific information, it has been estimated that by the time a student has completed four years of undergraduate study, much of the content she has learned is outdated. The new focus of STEM education, as endorsed and supported by the National Science Foundation, is on critical thinking skills, broadly defined as creative thinking, problem solving, analytical reasoning, or, in essence, the scientific method and scientific experimentation (Brewer & Smith, 2009). This case presents a novel STEM pedagogy that is called Application-Based Service-Learning (ABSL) (National Science Foundation, award #122675). ABSL integrates five high impact practices (learning communities, writing intensive courses, collaborative assignments and projects, undergraduate research, and service-learning or community-based learning) (Kuh, 2008) to teach technical writing, the scientific method and original research in a course setting. A general framework for the experimentation is set out for the students, but there is ample room for their input. Students must conduct their research with the focus on generating repeatable data of publication quality. They analyze their results, learn to correct mistakes, adjust experimental protocols, and determine what are logical next steps in the study. Using their work, they write technical documents that are one of the foundations for communicating science. In all stages of the courses, students are immersed in research-based science that requires their focus, attention and thought.

Project description. Laboratory-based science courses are a perfect context for students to address civic problems by utilizing scientific research to generate greater understanding and feasible solutions. In this case, the research was carried out by successive years of students enrolled in the course, with each subsequent year building on the data from the previous studies. Students from different institutions and disciplines worked on the same civic problem across geographic locations, building an online learning community to share the research data each generated. The students worked with community partners who were also actively trying to solve the problem. The goal was for the students' and community partners' interactions to help the students understand the problem, its impact on the community, and the current solutions. The students used their scientific training to investigate the problem and determine if the proposed solutions were feasible and if they had worked in other communities. During the course of the novel research conducted over an entire 15-week semester, students were taught technical writing, laboratory, problem-solving and critical-thinking skills.

With regard to the feral cat investigation, students worked with a local non-profit that provides sterilization and rabies vaccinations for feral cats. Over the course of two years at the clinics, students from a number of classes collected samples from over 400 feral cats. The students used molecular and microbiological methods to investigate the bacterial load and composition of feral cats and owned house cats. The samples and reagents the students developed provided the starting material for another ABSL class at LaRoche College. The lab class had a writing intensive component that is taught through a series of technical writing assignments about the civic problem and the data the students generated in class. An English faculty member from a community college collaborated on the design and improvement of the assignments. Students in several different English courses taught by this faculty participated in the feral cat project by investigating the public perception of feral cats, interviewing the lab students about their experiences, photographing the clinics, and classes and compiling a video about the course. Using these three institutions and faculty members, a learning community around the feral cat project was built that has persisted over the last six years. This learning community is used to experiment on the pedagogy, testing its strengths and weaknesses.

With respect to the acid mine drainage, AMD remediation is being addressed via a multidisciplinary, multi-institutional collaboration. Geology students at the University of Akron are studying the chemical processes that create and mitigate acidified sites. Microbiology students at Mt. Aloysius College are studying microbial and algal communities to identify potential bioindicators of environmental contamination and agents of bioremediation. Physiology students at Duquesne University are studying the

effects of acidification on amphibian disease resistance. Students will upload results of their scientific experiments onto a common website to form an interactive learning community. For example, amphibian skin bacteria that impact disease resistance as demonstrated by physiology students at one institution can be characterized, cloned and sequenced by microbiology students at another institution. Through authentic scientific experimentation, students construct knowledge relevant to a well-known community concern, thereby providing a valuable service to both the scientific community and the public. These authentic research activities in the classroom will be translated into service-learning activities, for example, engaging in science activities for K-12 students related to the themes of water quality and public and environmental health.

Discipline-specific learning outcomes. Natural and biological science learning has been documented across these projects using a mix of published and novel metrics. We have seen a significant increase in critical thinking skills as assessed by the Critical Thinking Assessment Test (Stein, Haynes, Redding, Ennis, & Cecil, 2007), which measures students' ability to solve real-world problems through reasoning skills. Students demonstrated an increase in content understanding and content retention with regard to having confidence to troubleshoot scientific protocols, identify necessary experimental controls, interpret data, and predict further experiments. Students also exhibited a dramatic improvement in technical writing ability. Comparing pre- and post-course surveys, students exited the courses with a much greater understanding of their chosen major and the jobs available within the discipline.

Civic learning outcomes. By using civic engagement to teach science, students learn that critical thinking skills and the scientific method can be applied and integrated into many different situations that affect their daily lives. This integration leads to the development of a set of civic skills including critical analysis, reasoning, and evaluating evidence7. Students develop the capacity to integrate their knowledge, skills, and values so that they can generate data driven solutions that have a significant impact on a problem. As they do this in concert with others, they acquire the skills to public problem solve with diverse partners. However, a data-driven solution is not guaranteed to fix a problem unless it is adopted and embraced by the community. The public problems that these students addressed are particularly contentious. They illustrate problems in which social responsibility and economic prosperity are perceived to be in tension with one another. As students effectively navigated this tension and engaged all of the interested parties to work through a solution, they exemplified compromise, civility, and mutual respect for the various interests and stakes in the issue. It is the synergy of data-driven solutions and community involvement and acceptance that can make a significant contribution to solving the

community problem.

Case #3: Using Photovoice as a Tool to Implement Community-Engaged Scholarship among Sophomore Nursing Students

Civic problem. According to the U.S. Census Bureau 2005-2009 American Community Survey, more than 2.5 million grandparents are householders and responsible for their grandchildren living with them. In Pennsylvania, this situation is the reality for 79,440 grandparents (AARP, 2012). The undergraduate nursing students became aware of this while working with elementary children in underserved communities as part of a service-learning class. They identified that grandparents were raising many of those children. They noted that this living arrangement presented unique challenges to both the grandparent and the child. Discussion with community partners confirmed a need to provide support to the grandparents as they raise their grandchildren and strive to promote health and education outcomes of their grandchildren. Yet, there is very little known about the needs of grandparents raising grandchildren, especially in underserved neighborhoods.

Opportunity for discipline-specific learning. The conceptual framework upon which the Duquesne University nursing curriculum is based is known as the Synergy Model, and it was originally developed by the American Association of Critical Care Nurses (AACN). The model purports that patient outcomes are enhanced when the nurses' competencies are compatible with the characteristics of the patient, thus, providing a "safe passage" for the patient as they gain an optimal level of wellness. While this model has been applied across settings, from in-hospital acute care to outpatient clinics, and implemented throughout courses, it has never been executed as community-engaged scholarship in the undergraduate program. Unlike the "patient" model, this project was unique because it allowed the student nurse to develop competencies in a community setting where grandparents were bringing their own varying capacities for such things as resiliency, vulnerability, and decision-making skills to the community-engaged experience.

Project description. A decision was made to design, conduct, and pilot a teaching/learning model that would facilitate students learning more about this living arrangement through faculty mentored, community-engaged research, while assisting in the identification of the needs of grandparents as caregivers. Two research questions were identified: (1) What is the lived experience of grandparents who are the primary caregivers of their grandchildren? (2) What is the experience of sophomore nursing students as they engage in qualitative research using Photovoice methodology to investigate the lived experience of grandparents raising their grand-

children? The second question was included to gain an understanding of the student experience when positioned as co-constructors of community engaged scholarship.

Photovoice provides individuals the opportunity to reveal salient insights into their lives through photography (Wang & Burris, 1994). Additionally, the methodology empowers community members to utilize photographs to define their concerns and priorities, influence policy makers, and shape policy (Hergenrather, Rhodes, Cowan, & Bardhoshi, 2009, p. 688). Through faculty mentoring, students utilized Photovoice to facilitate grandparents' expression, in their own words and through their own photographs, of the objects, situations, and settings that impacted their quality of life and that of their grandchildren.

Student collaborators for the community-engaged Photovoice research project were chosen from the sophomore clinical course, Synergy and Healthy People. Each student was assigned to a grandparent. The students were required to complete the grandparent interview, assist in theme identification, make a photo book from the photos taken by their assigned grandparent, and submit a poster for Duquesne University's Undergraduate Research Symposium. Student learning from the experience was evaluated utilizing the course's outcomes, which include increased proficiency in the nurse competencies of advocacy and moral agency, collaboration, and response to diversity (AACN, 2013).

Discipline-specific learning outcomes. The advocacy and moral judgment competency is defined as working on another's behalf to represent their concerns (AACN, 2013). This project provided the students with an opportunity to conduct a semi-structured interview that allowed the grandparents to speak for themselves, as they shared personal values. The students were exposed to values and life situations very different from their own, yet learned that all families have basic similarities, hopes, and dreams and that the grandparents "voices" need to be heard. As one student stated:

> One of the crucial points of the interview is when … [she] explained that she would like for more people in her situation to have more of a support system. Near the end of the interview, I said that she was a powerful woman and she got emotional. I did not realize that it meant so much for her to participate in the project. She really wanted to be heard.

The collaboration competency is the ability to work with patients and healthcare providers to achieve patient centered goals (AACN, 2013). Through the project, students were catapulted from a novice level of interaction where they were interested bystanders to a more expert level

of interaction. Students accepted their role as facilitator, while respecting the grandparents as equal and knowledgeable partners. The students demonstrated professional maturity in their accomplishments and their own self-image improved as the project unrolled.

> I was apprehensive to interview my grandparent. I had observed client interviews before but had not performed them. But my grandparent was so nice…. and I realized that the grandparents really were our partners in this project and that they wanted their voices heard and that I was helping them do that.

The AACN defines the response to diversity competency as the ability to recognize and incorporate differences in lifestyle, socioeconomic status, and values into the provision of care (AACN, 2103). Through the project, the students soon learned that each grandparent situation was uniquely defined. Some grandparents were thrust into their situations due to the violent death of their own child; others had care-ship of their grandchildren for several years only to learn that their children now wanted them back and the grandparent had no legal rights; and others chose to have their grandchildren live with them while their children regained social stability. Learning about these various family situations provided an opportunity for students to learn from exposure to the diversity of situations. In the words of the students:

> I did not expect her story to be so heartbreaking and I honestly can not imagine what it feels like to go through so many tragic events, one after another. My grandparent really allowed me to open my eyes to more than what I see on a daily basis…
>
> and
>
> I was very nervous going into the first interview… she is a recovering addict raising one grandchild and spends a lot of time with another one of her grandchildren. At one point during the interview, I found myself tearing up because of how powerful her photos truly were…I am very excited for the next time to meet her and see what other photos she has to share.

Civic learning outcomes. The impetus for this community-engaged scholarship emerged from the lack of knowledge around the increasing number of grandparents raising grandchildren. The student nurses developed information gathering skills from *multiple sources of evidence,* including oral interviewing, journaling, and imagery. The qualitative methodology allowed for *critical inquiry, analysis, and reasoning*. Student reflections and dialogue identified a value acquisition related to an increased

respect for the grandparents' decisions and experiences, increased *empathy* and *tolerance* resulting in a more *open-minded* approach for future encounters with patients and community members.

As a result of the project, a support group was initiated by one of the grandparent participants. That grandparent expressed a desire for health education at one of the meetings. The nursing students were eager to help and volunteered to conduct a session on home safety that included safety needs of both the grandparents and the grandchildren. The students were not required to do this as a part of either the course or the project. This effort was a demonstration of their willingness and newfound ability to become co-collaborators on a public program with their community partners. When asked why they were willing to put in the extra effort to develop the training, the students stated: "[the grandparent] have been through so much, how could we not help?"

Discussion

Interrelationship between Civic and Disciplinary Learning

Given the focus on civic learning promulgated by bodies such as the American Association of Colleges and Universities, the US Department of Education, Science Education for New Civic Engagements and Responsibilities, and the Lumina Foundation's Degree Profile Project, students' civic development is promoted as one possible end goal of community-university engagement. The cases presented here confirm the opportunity that exists to enhance students' disciplinary knowledge while also building civic competence; further, they illustrate how civic learning involves the synthesis of disciplinary learning and civic sensibilities. In fact, as demonstrated here, civic competence is not additive when considering disciplinary learning, but is part and parcel of disciplinary preparation for an engaged citizenry. Common amongst the cases is a demonstrated capacity among students to work on public problems; framing problems by leveraging diverse perspectives; demonstrated ability to work collaboratively; and application of specific disciplinary frames and methods to "real life" settings. Combined, they formulate an expressly democratic orientation to scholarship (Saltmarsh & Hartley, 2011).

Addressing public problems. Though each of the disciplinary spheres represented by these cases utilizes a different language for addressing public problems (and the specific faculty herein have varying degrees of comfort with dispositions of action), all illustrate how students' capacity to become effectively involved in addressing public problems is enhanced. Within the criminal justice policy case, this was expressed as moving students from apathy to activism; within the nursing case, this was charac-

terized as moving from caring to advocacy; within the sciences, this was positioned as public engagement. Further, this capacity is exemplified in the sciences as students claim the research as their own rather than view it as a replication of a canned laboratory procedure.

Leveraging diverse perspectives and collaboration. Common across the cases is the notion that pressing public problems are too complex to be framed from any one perspective; rather, leveraging a diversity of stakeholder voices, sources of evidence8, and kinds of data are critical to framing problems in ways generating effective solutions that are contextualized, relevant, and practicable. This is reflected in the co-constructed nature of each of the projects. For example within the nursing case, students, faculty, and grandparents were positioned to co-construct the study and resulting interventions; within ABSL, students from multiple disciplines and institutions collaboratively addressed environmental problems that are geographically contextualized; within the prison, inside and outside students defined criminal justice policy from deeply divergent life experiences, yet shared academic experiences. This co-construction can alternatively be defined as a robust conception of collaboration, crossing the boundaries sometimes maintained between students, faculty, and community collaborators.

"Real life" application of discipline-specific frames. Whether this is a general outcome of students being able to apply an analytic framework (such as the scientific method) to a contextualized situation, or the application of a specific framework (such as the Synergy Healthcare Model) to a broader context than that in which students learned it, in all of the cases, students were successfully enabled to acquire the analytic skills of their disciplines and to further apply these as part of everyday life.

Conclusions and Implications

Institutions that satisfy their desire to inculcate civic skills and dispositions through implementation of a standard educational method (such as service-learning) may experience the loss of civic purpose intended by those methods. As is pointed out in the recent AAC&U report (The National Task Force on Civic Learning and Democratic Engagement, 2012), a teaching or research method is not synonymous with civic learning or democratic engagement. Further, as asserted by the Democratic Engagement White Paper (Saltmarsh, Hartley, & Clayton, 2009), for higher education to fully realize its public purpose, it cannot reduce its efforts to implementation of activities devoid of democratic purposes. Specific and structured teaching methods and engagement strategies are only the means to achieve greater ends – they are not ends in themselves. The cases included within this article all represent significant attempts to achieve civic and democratic

ends: developing solutions to pressing public problems, which includes preparing our students as engaged and active citizens who are able to draw upon specific disciplinary skills sets to enact change. They are also fundamentally integrative: They illustrate that key to civic engagement is integration between disciplinary knowledge and civic sensibilities; functions of teaching, research, and service; and positioning diverse stakeholders and perspectives as a means to frame the problems we address.

Notes

[1]The Framework for Twenty-First-Century Civic Learning includes more than 25 elements. For example, civic learning encompasses such skills, knowledge, values, and actions as "understanding one's responsibility to the wider public, knowledge of diverse cultures, knowledge of political levers for influencing change, critical inquiry, gathering and evaluating multiple sources of evidence, deliberation across difference, collaborative decision making, respect for freedom and human dignity, empathy, tolerance, justice, ethical integrity, integration of civic elements to inform actions, moral discernment, public problem solving," etc. (p.4).

[2]For a detailed description of the Inside-Out program see Conti, Morrison, and Pantaleo (2013). Additionally, for more information on how Inside-Out was developed through a collaborative dialogue between university students and incarcerated men, see Pompa (2002).

[3]As was done in the previous section, the italicized words indicate knowledge, skills, values, or collective actions that are part of the Framework for Twenty-First Century Civic Learning and Democratic Engagement

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