

Teaching with the Future in Mind: The Importance of Community-Engaged Projects Incorporating Students

LANITA WRIGHT
Kennesaw State University

KEVIN FINK
University of Central Oklahoma

JENNIFER SUNSHINE COWAN
University of Central Oklahoma

Abstract

Engaging undergraduate students in meaningful community work holds benefit for students, faculty, and the broader community. The purpose of this manuscript is to detail the opportunities, barriers, and lessons learned that related to three community research projects, utilizing the Socio-ecological Model as a guiding framework. Faculty created operational definitions for each level (intrapersonal, interpersonal, organization, community, and policy) of the Socio-ecological Model in order to consistently review and compare each project. The process allowed faculty to recognize shared opportunities, barriers, and lessons learned across multiple levels. Opportunities included fostering emotional intelligence and patience, researching in teams, developing qualitative research skills, incorporating community input in local health programming, fostering meaningful community partnerships, and influencing local policies. Barriers included having adequate time to conduct meaningful studies, providing time for training, and navigating conflicting priorities between partners. Lessons learned included knowing one's motivation, as well as the importance of providing feedback, flexibility, and building intentional collaborations. Analyzing these factors will allow faculty the ability to recognize key issues to address as well as pitfalls to avoid in future community-focused, experiential learning research experiences with students.

Undergraduate research experiences (UREs) are recognized as high-impact practices (Kuh, 2008) providing multiple benefits to students. Such benefits from research literature include a positive relationship with fourth-year GPA for undergraduate students participating in research during their first year (Bowman & Holmes, 2018), increased university program satisfaction (Wayment & Dickson, 2008), first-year student satisfaction (Bowman & Holmes, 2018), and increased understanding and ability to conduct research (Russell, Hancock, & McCullough, 2007; Stebner, King, & Baker, 2016). Undergraduates who took part in an early URE were more likely to stay through their second year compared to students who did not participate in an early URE; also, students who participated in early UREs and had average MCAT scores had an increased chance of being accepted to medical school compared to students who did not participate in early UREs and had average MCAT scores (Vincent-Ruz, Grabowski, & Schunn, 2018).

Experiential learning, such as URE, places the learner in real-world situations to apply knowledge and skills, reflect, and then integrate potential changes into their learning. Experiential learning itself is a process where learning occurs *during* the learner's experience (Kolb, 1984), with the learner both affecting and being affected by goals, cultures, experiences, and environments within a collaborative community space, such as with service-learning experiences (Cashman & Seifer, 2008).

Community-engaged learning (CEL), an extension of experiential learning, creates an experiential opportunity for students to engage, partner, and serve a community (Felter & Baumann, 2019; Makani & Rajan, 2016). Howard (1998) described service learning not as "the addition of service

to learning, but rather the integration of service with learning” (p. 21). Here Howard (1998) was referring to adding service learning to an academic course, with an experience that supported and enhanced course learning outcomes, where service learning serves as content along with other learning objectives and opportunities.

Transformative learning, another extension of experiential learning, is an “iterative process through which the adult learner is expanding their perspective through meaning-making” (Farrell Kilbourne et al., 2020, slide 3). This process includes a willingness to learn while being immersed in an experience. Transformative learning places the student at the center of the experience (Calleja, 2014) and may create cognitive dissonance (Farrell Kilbourne et al., 2020). The process includes critical reflection, rational discourse, and an expanded perspective that may shift an individual’s identity, attitude, or worldview. This then leads to a greater willingness to learn (Farrell Kilbourne et al., 2020). Beginning in 2006, the University of Central Oklahoma operationalized transformative learning (TL; King et al., 2018) and formally adopted TL in 2007 (Walvoord & Hynes, 2016). The purpose of this manuscript is to detail opportunities, barriers, and lessons learned related to three TL, community-engaged research projects, utilizing the Socio-ecological Model as a conceptual framework (Bronfenbrenner, 1977; Sallis et al., 2008). The manuscript will detail three specific TL projects facilitated by University of Central Oklahoma faculty and students to meet the needs of the local community; to establish a level of anonymity, the names of each organization are not expressly stated.

TL Project Descriptions

Hospital

This hospital is locally-owned and the largest non-profit health care system in the state. This hospital’s 2019 Community Benefit Report notes that the system provided more than \$20.3 million in financial assistance to more than 9,800 Oklahoma residents in the year prior. The system focuses on community building through community support and advocacy, and free health screenings and services. Students in an undergraduate public health capstone prerequisite course partnered with this hospital to assist with the required Community Health Needs Assessment (CHNA) under the Affordable Care Act (ACA) guidelines for non-profit hospitals. The purpose of the partnership was to provide qualitative and quantitative data prioritizing populations from specific zip codes to the overall CHNA report.

The partnership began with the hospital’s cancer center in 2012 and was repeated with the same hospital team in 2016. It continued in 2020 with a community health arm of the hospital. Each time, students worked in committees to develop and test survey and focus group questions; develop research processes, documents, and submit IRB paperwork; analyze results through SPSS as well as the categorization and organization of qualitative data; and create a written report to submit back to the hospital for their report to the IRS. While data collection was not included in the 2020 partnership due to COVID constraints, students in the 2012 and 2016 courses recruited community participants and facilitated focus groups, giving short surveys prior to the focus group sessions. Additionally, a graduate practicum student served as a liaison for the 2020 partnership, providing needed assistance when COVID restrictions changed the ability for all students to be physically engaged in the community.

For each of the three years where this partnership was embedded into the course, all students in the fall prerequisite course then moved to the capstone course the following spring. This allowed an extension of time, where students could finalize their analysis and report the following semester, as needed.

Granting Organization

This organization awards grants, funds evidence-based programs, and supports research in Oklahoma related to chronic illness and disease prevention. As a component of offering evidence-based programming, the organization works with evaluators examining both short- and long-term impacts of grantee work across multiple programmatic efforts. The authors of this manuscript subcontracted with one

such evaluation group for one evidence-based program. The purpose of this subcontract was to qualitatively examine grantees' experiences with resources, products, and materials developed and provided by the grant-maker, partners of the granting program, and the evaluation group. The grant-maker and associated partners provided materials and resources, including the following: sample policy language and evaluation guidance; trainings; and technical assistance. Structured interviews were conducted with grantee program representatives by the authors and four undergraduate research assistants. Thirty-one grantees were randomly selected and interviewed by telephone by undergraduate research assistants. Interviews were audio-recorded and transcribed by a transcription service. Transcripts were uploaded to NVIVO 12 Pro and analyzed using a grounded theory approach by the full research team; a written report was provided to the granting organization.

Nonprofit Organization

This nonprofit organization is the convening/backbone organization of a multi-partner collaboration, whose partners work together to lower the teen birth rate in the county. The organization serves as a resource and connector for partner organizations. The organization assists with mobilizing the community, collecting and analyzing data, and advocating for adolescents. A faculty-student-professional research team (comprised of a public health faculty member, undergraduate research assistant, and three local public health professionals) collaborated to conduct a mixed-methods project to assess the needs of the community and barriers for sexual health programming. The undergraduate research assistant and faculty developed the qualitative interview question path and assisted with the quantitative survey development. The team interviewed local caregivers, faith leaders, and community-based organization staff. Interviews were audio-recorded and transcribed by a transcription service. Transcripts were uploaded to NVIVO 12 Pro and analyzed using a grounded theory approach by the student and faculty. A final report was prepared in conjunction with the nonprofit organization's director of research.

Findings

Although each project was unique, faculty noticed cross-cutting themes pertaining to community-engaged work involving undergraduate students, particularly related to multi-level personal and professional influences and experiences for faculty, students, and community. Three primary themes will be addressed through a Socio-ecological Model lens: opportunities, barriers, and lessons learned. The authors operationalized each level (intrapersonal: individual level influences/experiences; interpersonal: relational influences/experiences; organizational: specific organizational/institutional built, social, and policy influences/experiences; community: factors influencing and influenced by local community members; and policy: policy/advocacy related influences/experiences) of the Socio-ecological Model in order to consistently review and compare each project.

Opportunities

Intrapersonal & Interpersonal Opportunities

Faculty had an opportunity to develop interpersonal skills by working alongside students and partner/community agencies. Across all three projects, faculty navigated iterative protocol and tool development processes alongside partner organization staff. Faculty were able to move beyond teaching and researching alone (or solely alongside other faculty) to teaching and researching alongside students, fostering research skill development, patience, and emotional intelligence for faculty while also promoting the same among students.

Students learned and applied research methodology first-hand. Across each project, students benefited from planning, collecting, analyzing, and reporting research data. This level of involvement was well beyond merely learning research and evaluation design and methodology by sitting in a classroom setting. For example, one student team member completed an undergraduate quantitative research course and was able to learn a qualitative methodology specific to this student's partner organization (as described above). Two students applied concepts they were introduced to in an undergraduate assessment

and evaluation course, expanding on their skill set by using NVIVO 12 Pro for a project. Students were able to work alongside other students, discuss and negotiate results and meanings of findings, as well as form subgroups/committees when appropriate, and take some ownership of the final product. Students had opportunities to apply research methodology in community settings, learning nuances of community-engaged work. Although students may not have seen these as opportunities during the project, they were able to learn more about changing timelines for conducting community work, complications with recruiting and/or maintaining participants, seeking donations for incentives, and ethical considerations. Student researchers adapted and negotiated personal and partner schedules and deadlines in a real-world timeframe rather than artificial semesterly-frame. This dissonance of schedules provided students an experiential applied research opportunity and created an environment that encourages TL. Several students were also able to meet internship supervisors and future employers and consider research opportunities in graduate school settings.

Institutional Opportunities

Partner organizations had an opportunity to have a non-biased entity to facilitate applicable, relevant evaluation and research, which reduced the likelihood of biased evaluative results. Although local agencies had to edit and approve final reporting documents, they were able to apply their time elsewhere, rather than conduct research projects in addition to their direct service or project management. The discussion with student researchers regarding each team's role with partner institutions allowed for deeper thinking about these partnerships as well as a better understanding of the benefits of non-biased evaluation and research.

In addition, the university was able to be a visible partner in the community. University of Central Oklahoma is known as a metropolitan institution, because of the university's commitment to serving the community. Being a visible partner allows institutions to be actively involved in the community and be visible for recruitment/enrollment purposes, which is and will remain a relevant issue for institutions. It is important for potential students to see the benefits of attending their university and learning applicable skills at their institution.

Lastly, the university was able to utilize contracts to support student research opportunities and faculty research time (in two of the projects). This promotes more buy-in from students and faculty and also teaches the importance of being a good steward of ones' work time while promoting connectivity to the institution. Additionally, opportunities for TL were present as students navigated the processes of research contracts and applied this to their work.

Community Opportunities

Community members had an opportunity to inform local research and potential programs that benefited their own community. In each included project, community members were actively involved in one or more ways: informing data collection and/or tool development, participating in interviews, and/or participating in post-project presentations. Moreover, community members had a voice in priority issues, including influencing the way nonprofits and healthcare systems respond to and interact with communities (including racial ethnic minority groups and those who have limited health literacy, transportation, and/or childcare responsibilities). This commitment to promoting the voice of the community throughout each research project ensured that students applied classroom teachings on professional values to their experiential learning, providing opportunities for additional TL.

Barriers

Intrapersonal & Interpersonal Barriers

Contracted and grant-related projects involve balancing multiple interpersonal relationships, especially relationships amongst project funder and grantee/contract recipients, and relationships amongst project staff. Barriers arose amongst project staff due to the nature of faculty and student life. Students were enrolled in 12 or more credit hours, had part-time or full-time work commitments, and held familial obligations. Faculty also taught 12-credit hours and led additional projects and committee work. Project staff also had to be prepared for staff leaving mid-project (due to conflicting commitments). There were barriers related to time and patience required for faculty to develop/train student researchers, conduct

quality control checks as skills were solidified, and develop workplace culture and environment (including finding office space, purchasing equipment, and acquiring office phones for research use). Navigating these various responsibilities of both students and faculty created challenges that affected completion timelines. Faculty researchers, however, understood the importance of navigating these barriers because all three projects were viewed from initial conversations with community partners as transformative learning opportunities for students. It was understood by community partners that students would be involved, and partner organizations deliverables could still be met.

Interpersonal relationship barriers amongst project funders and research staff included negotiating expectations, deliverables, stipulations for reporting progress, and timelines. Timelines differed between project funders (such as funders needing information to inform programmatic decisions and those needing information for reporting to other agencies) and research staff (such as required time to develop a research protocol, acquire equipment and resources, and hire and train student researchers). Additionally, though student researchers learning or experiencing new research methodologies was a clear opportunity, these researchers required time to learn and practice prior to project implementation. This created a barrier due to navigating partner timelines as well as timelines of student researchers (e.g., ability to coordinate training schedules). Barriers such as these provided opportunities for student researchers to assess their abilities to meet deadlines while working with a team, providing additional possibilities for TL.

Institutional Barriers

Barriers arose with project staff and their home institution, related to time and training. Universities have set procedures, software, and protocols that hiring staff and project leaders must use or access. Faculty had to be trained to utilize human resources software to best manage student payroll and financial resources, manage timecards, follow protocols for software purchases (e.g., NVIVO), and acquire long-distance phone codes.

Moreover, there were institutional barriers related to policies for external contracts and funding faculty to conduct research. Faculty were approached by external agencies to be “hired” to provide evaluation, data collection, or other services. However, gaining approval for the external funding to support faculty time was not successful in one of the projects due to the lack of infrastructure in place at the time, at this primarily teaching university. Incorporating discussions of these institutional barriers into meetings with student researchers allowed for reflection, problem solving, and provided additional TL opportunities.

Policy Barriers

Changing policies related to reproductive rights, access to health care, and access to grocery stores and bike lanes, for example, take advocacy, policy change, and time for implementation. The outcomes related to these three projects were utilized to inform changes in the community, but seeing actual policy level change was not immediately apparent. Though policy change may not be readily noticeable, students were able to experience applied research within their community providing necessary information to partnered organizations regarding potential program revisions, assessing needs, or compliance. Ensuring that long-term thinking about policy needs was included in discussions and reflections with student researchers promoted an environment ripe for TL.

Lessons Learned

Intrapersonal Lessons

We learned identifying personal and professional motivations is a good start, but establishing our “why” was most important. For faculty at universities with heavy teaching loads, our “why” focused on being impactful in teaching and research, connecting our programs to community partners to build program reputation, applying course content to real-world applications, providing opportunities for students through environments that include disorienting dilemmas and deep reflection (in an effort to support transformative learning), paying student researchers for their efforts, and increasing networking opportunities. For students, their “why” included gaining experience for personal growth, graduate school applications, and landing paid internships/jobs. Students with more intrinsic, internal motivations persisted further as complications arose. It was important for us to personally remember our “why” when

funding shifted from paid to not paid, timelines shifted, and analysis/reporting expectations changed in some projects.

Interpersonal Lessons

We learned students benefited most when they were not shielded from conflict or misunderstandings/negotiations and when they had a level of ownership of the project; incorporating them from start to finish, an important aspect of experiential learning, allowed for deeper interpersonal relationships and the application of emotional intelligence. Moreover, communication needs to be clear and often. We each experienced disconnect, occasional lack of responses, and misunderstandings. We had to learn how to best communicate with our emerging adult researchers (e.g., text messages/group chats rather than email, fewer in-person meetings, concise agendas, and clear expectations) and offer grace when expectations were unmet. Discussing these interpersonal lessons among the team offered student researchers time for reflection and growth that can lead to TL.

Institutional & Community Lessons

Doing community work is an iterative process that involves constant negotiation with institutions and community partners. We learned the importance of patience and persistence. One student researcher remarked she had no idea how much preparation and meetings were required to conduct qualitative work in the community; she realized it was not as simple as having an idea and conducting a project. Adding people adds multiple goals, thought processes, methods for accomplishing desired goals, etc. Due to conflicting priorities and timelines, we learned the importance of knowing barriers will exist with institutions and community partners. Moreover, we experienced ethical dilemmas, including not being able to control how agencies reported results to the community. We learned that data ownership and dissemination plans should be established prior to the project. Throughout each of these lessons, it was paramount that student researchers were a part of the discussion, promoting reflection on disorienting dilemmas and allowing for the possibility of transformation.

Implications for Transformative Learning Practice

First, faculty should develop intentional partnerships with students and communities, not research just to research. We noticed our community projects incorporating students were mutually beneficial: assisting with tenure and promotion for faculty; increasing real-world experiences for students; pursuing the university's mission of transformative learning; encouraging retention and student success, and internship/job opportunities for students; and ensuring community members' needs were met. These projects truly allowed for professional and personal growth for all involved. Despite barriers that arose, students and faculty learned that deliverables could be provided and deadlines met. Additionally, researchers were able to overcome and negotiate through resilience, while working in an environment that included opportunities for growth and reflection

Second, faculty should be flexible, without minimizing rigor in research. Applied research opportunities may not always include calm, placid waters. Consider timelines and meeting shared needs. We recognize grant deadlines cannot be ignored. However, maintain a level of rigor so professional needs of faculty and students are not lost, with the changing timelines and community needs. By not yielding to partners' desires to minimize rigor to meet reporting deadlines, we strengthened the end project and helped to better inform future policies. Openly discussing these decisions with student researchers and asking for their input created space for meaningful reflection and shared governance. These aspects contributed to an environment conducive for TL.

Third, faculty should develop community- and student-centered projects to promote sustainability. Although community and policy level influences are difficult to incorporate in research projects, intentional incorporation promotes sustainability. For example, with one of the nonprofit projects, community members learned what the nonprofit was doing to decrease teen birth rates in their local community, could share what they wanted to see differently, and could sign up for working groups to either implement programs as peers or help advise programs. This helped with community awareness of teen pregnancy prevention and influenced the way community members supported legislation in a state

that currently does not mandate health education. Experiential learning, like UREs, may provide opportunities for students to experience and appreciate a facet of their work previously unknown to them. UREs can provide opportunities to retain students within a university and in a particular program and field, creating further sustainability at different levels.

Conclusions

Incorporating undergraduate students in community-engaged work is multi-beneficial for students, faculty, and the community. Although time, communication, and changing priority barriers existed, benefits for each priority population outweighed the barriers in all projects presented. Recognizing opportunities, barriers, and lessons learned at each level of the Socio-ecological Model will allow faculty the ability to address potential pitfalls to avoid in future community-engaged, transformative learning research experiences with undergraduate students.

References

- Bowman, N.A., & Holmes, J.M. (2018). Getting off to a good start? First year undergraduate research experiences and student outcomes. *Higher Education*, 76(17), 17–33. <https://doi.org/10.1007/s10734-017-0191-4>
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531. <https://doi.org/10.1037/0003-066X.32.7.513>
- Calleja, C. (2014). Jack Mezirow’s conceptualisation of adult transformative learning: A review. *Journal of Adult and Continuing Education*, 20(1), 117–136. <https://doi.org/10.7227/JACE.20.1.8>
- Cashman, S.B., & Seifer, S.D. (2008). Service-learning: An integral part of undergraduate public health. *American Journal of Preventative Medicine*, 35(3), 273–278. <https://doi.org/10.1016/j.amepre.2008.06.012>
- Farrell Kilbourne, C.M., Keesee, A., Wullstein, K., Walvoord, M.E., Wimmer, B., Verschelden, C., & King, J.M. (2020). Student Transformative Learning Record (STLR). [PowerPoint slides]. University of Central Oklahoma.
- Felter, E.M., & Baumann, S.E. (2019). Development of a community-engaged classroom for teaching health communications: Lessons learned from nine semesters of implementation. *Pedagogy in Health Promotion: The Scholarship of Teaching and Learning*, 5(4), 246–253. <https://doi.org/10.1177/2373379918824353>
- Howard, J.P.F. (1998). Academic service learning: A counternormative pedagogy. *New Directions for Teaching and Learning*, 73, 21–29. <https://doi.org/10.1002/tl.7303>
- King, J., Farrell, C.M., Walvoord, M.E., & Wimmer, B. (2018). Fostering a campus-wide community around student transformative learning. In M. Welch, V. Marsick, & D. Holt (Eds.), *Building transformative community: Exacting possibility in today’s times* (pp. 624–629). Teachers College, Columbia University.
- Kuh, G.D. (2008). High-impact educational practices: What are they, who has access to them, and why they matter. Report from the Association of American Colleges and Universities.

- Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.
- Russell, S.H., Hancock, M.P., & McCullough, J. (2007). Benefits of undergraduate research experiences. *Science*, 316(5824), 548–589. <https://doi.org/10.1126/science.1140384>
- Sallis, J.F., Owen, N., & Fisher, E.B. (2008). Ecological models of health behavior. In: K. Glanz, B.K. Rimer, K. Viswanath (Eds.). *Health behavior and health education* (pp. 465–485). John Wiley & Sons.
- Stebner, S., King, A.E.H., & Baker, L.M. (2016). Expectations and experience: An exploratory study of undergraduate research experiences as viewed through experiential learning theory. *North American Colleges of Teachers of Agriculture*, 60(4), 365–371.
- Vincent-Ruz, P., Grabowski, J., & Schunn, C.D. (2018). The impact of early participation in undergraduate research experiences on multiple measures of premed path success. *Scholarship and Practice of Undergraduate Research*, 1(3), 13–18. <https://doi.org/10.18833/spur/1/3/12>
- Walvoord, M. & Hynes, S. (2016). Evidence of student transformative learning through a campus-wide student learning record. In A. Nicolaidis & D. Holt (Eds.), *Engaging at the intersections* (pp. 519–522). Tacoma, Washington, Pacific Lutheran University.
- Wayment, H.A., & Dickson, K.L. (2008). Increasing student participation in undergraduate research benefits students, faculty, and department. *Teaching of Psychology*, 35, 194–197. <https://doi.org/10.1080/00986280802189213>

Author's Note: LaNita Wright is an assistant professor of Public Health at Kennesaw State University. Kevin Fink is an assistant professor of Outdoor and Community Recreation at the University of Central Oklahoma. Jennifer Sunshine Cowan is the Assistant Dean of the Jackson College of Graduate Studies and a professor of Public Health at the University of Central Oklahoma.

Citation: Wright, L., Fink, K. & Cowan, J. S. (2022). Teaching with the future in mind: The importance of community-engaged projects incorporating students, *Journal of Transformative Learning*, 9(1), 18–25.