

Keeping Our Promise: Reenvisioning and Sustaining a 20-Year Service-Learning/Community Service Student Grant Program

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Abstract

As the higher education landscape in the United States continues to be redefined (Boggs et al., 2021; Post et al., 2023), it is crucial that community-engaged professionals critically examine strategies in supporting community-campus partnerships to maximize engagement and positive impact. Since its founding in 2003, little has been done to assess programmatic outcomes and strategically align the Purdue Office of Engagement's student community service/service-learning grant program with efforts to enhance and normalize engagement across the university. This article details how staff reenvisioned the grant program based on the evaluation results and are working to strategically integrate increased knowledge and awareness of engagement and its linkage to the university's land-grant mission for students into revised grant programming. Revisions include intentional reporting opportunities for impact metrics, collaborating with a course in data science to create a new grant submission and application review database, and future plans to strategically evaluate community impacts.

Keywords: service-learning, engagement, community partnerships, grant program, program evaluation



In the wake of societal and economic issues exacerbated by the COVID-19 pandemic, higher education is facing unprecedented challenges such as budget cuts, declining enrollment, and challenges to the value of a college degree, among others (e.g., Belkin, 2023; Boggs et al., 2021; Harvey, 2021; Walsh, 2020). These challenges have necessitated mergers of institutions and consolidations of programs, requiring decision makers to focus on maximizing efficiency and flexibility toward ensuring long-lasting resilience. To complement the push for efficiency and flexibility, there is an opportunity to increase the impact of programming, specifically service-learning and engagement programs that can strengthen an institution's ability to create meaningful, career-ready learning opportunities for students and beneficial outcomes for communities.

Programs of service-learning that prioritize learning gains such as "community impact," "knowledge," "civic engagement,"

"experience with analysis, synthesis, and application," "discipline-specific skills," and/or "problem-solving skills" are highly valuable, as they support students in learning how to use skills that they develop in the classroom to address systemic challenges in communities, skills that are also universally applicable to cross-discipline community and professional spheres postgraduation (Astin & Sax, 1998; Berry & Workman, 2007; Blewitt et al., 2018; Brandes & Randall, 2011; Celio et al., 2011; Culcasi et al., 2022; Fairfield, 2010; Mitchell, 2008; Omar et al., 2022; Post et al., 2023; van Laar et al., 2017). Service-learning can also strengthen a student's sense of belonging. A meta-analysis of 62 studies involving 11,837 students indicated that, compared to controls, students participating in service-learning programs demonstrated significant gains in attitudes toward self, attitudes toward school and learning, civic engagement, social skills, and academic performance, thereby reaffirming the power of service-learning to help

students realize their full potential (Celio et al., 2011).

Even though the benefits of service-learning are well documented, many institutions fail to institutionalize service-learning initiatives. Without recurring resources for service-learning, as well as systematic tracking and evaluation, service-learning initiatives can flounder, lack rigor, and/or fail to be accessible to all students (Furco, 1999; Welch & Saltmarsh, 2013). Although Purdue's community service/service-learning grant program demonstrates committed recurring funds, research is lacking toward evaluation of programmatic outcomes and strategic alignment of the grant program with efforts to enhance and normalize engagement across the university. Performing such evaluation offers an opportunity to deepen the meaning, enhance access to service-learning outcomes for students and communities, and increase university and college retention (Bringle et al., 2010; Caspersz & Olaru, 2017; Coelho & Menezes, 2021; Goff et al., 2020; Mungo, 2017; Simonet, 2008).

Context

Purdue University is a public land-grant institution with campuses across Indiana and the nation. Land-grant universities were established to serve the needs of their surrounding communities and educate responsible citizens who can contribute to the public good. Partnerships between universities and communities are critical to fulfilling the land-grant mission. To support the Purdue land-grant engagement pillar, the Office of Engagement (OoE) was founded in 2001 by President Martin Jischke to serve as a liaison between university researchers, students, and entities off campus desirous of working with them. In addition to five regional offices, 92 Extension hubs, signature faculty development programs, and a scholarly journal for students, the office administers a student grant program. This article shares the Purdue OoE's efforts to critically examine and reenvision the grant program.

Grant Program History

In 2003, President Jischke earmarked funding for service-learning and engagement projects to provide incentives for students and faculty to take steps toward understanding and embracing the engagement mission of the university. The program provides funding to undergraduate, graduate,

and professional students on West Lafayette, Northwest, and Fort Wayne campuses who execute projects through collaboration with communities, nonprofit agencies, schools, and governmental bodies. Projects may be conducted for a course, a student organization, or by a student individual or group of students. To foster project quality and adherence to program guidelines, all projects must have a faculty or staff mentor and community partner sponsor. Partners and projects are jointly determined by the students, mentors, and partner sponsors. Grant projects must be completed in the semester awarded, and grant amounts range from \$100 to \$500 for an individual or a maximum of \$1,500 for a team. A database and an administrative assistant manage the application process and collect information from the grant applications. Grants are awarded based upon merit, as well as alignment with the OoE mission. Not all applications are funded.

At the completion of the grant, students are encouraged to submit a final report approved by both the mentor and community partner, including (1) financial reporting that conforms to OoE requirements and (2) learning gains and benefits to participation. Sometimes students fail to complete a final report for their grant project. Since 2014, when a digital recordkeeping system was implemented, nearly 1,500 grants have been awarded, involving over 400 community partners nationally and internationally around the world, awarding over \$1,000,000 in funding and engaging nearly 18,000 undergraduate, graduate, and professional students.

Example Grant Projects

Grant projects funded are highly diverse across academic disciplines, project objectives, and communities impacted. The office aims to fund projects that will result in gains of "community impact," "knowledge," "civic engagement," "experience with analysis, synthesis, and application," "discipline-specific skills," and/or "problem-solving skills." Examples of projects supported through the grant program include the development of a cost-effective "beep ball" for visually impaired individuals, as well as the implementation of community gardens to reduce food insecurity. For the beep ball project, students created a new, more cost-effective beeping ball for a club that competes in the National Beep Baseball Association League. Beep baseball, a competitive sport for visually impaired

individuals, is played with a softball that makes a pulsing, beeping sound when a pin is removed. Students used the grant funds to purchase materials to support designing and constructing a cheaper yet more mechanically durable beep ball.

For the food insecurity project, 70 students assembled five garden beds for GrowLocal Lafayette, a network for local volunteers who run sharing gardens for community members. More than 1,000 community members were positively impacted by the newly constructed garden beds, and students learned basic hands-on construction work, how to operate in a team, and how mutual aid can be leveraged to encourage food justice. These examples illustrate the value of supporting service-learning initiatives across disciplines that center on civic engagement, community impact, and more (Astin & Sax, 1998; Berry & Workman, 2007; Blewitt et al., 2018; Brandes & Randall, 2011; Celio et al., 2011; Culcasi et al., 2022; Fairfield, 2010; Mitchell, 2008; Omar et al., 2022; Post et al., 2023; van Laar, 2017). Further, these examples demonstrate how service-learning connects participating colleges and universities with the value of diverse community partnerships (Buys & Bursnall, 2007; Geller et al., 2014; Sandy & Holland, 2006; Tyndall et al., 2020; Vizenor et al., 2017).

Evaluation Methods

In 2021, the OoE set out to evaluate the administration and impact of the grant program guided by the following questions:

1. How can we capture data and measure impact more effectively?
2. What are students' learning gains and how can we improve them?
3. How can we enhance reciprocity between the grant participants?

After consulting the Institutional Review Board (IRB-2024-1678), it was determined that this "activity does not meet the regulatory definition of human subjects research," and our project did not need IRB approval, as the work is part of internal programmatic evaluation and quality improvement. The evaluation effort was divided into two phases. Phase 1 focused on evaluating the grant program administration, including workflow and gaps in data collection (Phase 1.1), as well as conducting quantitative descriptive analysis of final reports

drawn from a sample of completed grant projects along with qualitative analysis of student learning outcomes from this sample (Phase 1.2). In response to the results from Phase 1, Phase 2 included revising the grant program application process, database, and deliverables, as well as exploring interventions for increasing student learning gains. To maximize the breadth and depth of the results, we assembled a team of staff and students, including the director of service-learning, a lead administrative assistant, an evaluation specialist, and two graduate students to complete this work.

Phase 1.1: Grant Program Administration

To evaluate the grant program administration, our team performed an internal assessment in summer 2022. Individually, team members reviewed the grant administrative process, including the grant application, database functionality, approval process, and business office requirements, noting areas for improvement. The team then had reflective conversations biweekly to discuss areas for improvement and future goals. In addition to understanding how to effectively capture, measure, and report data, our group was also keen to explore ways to enhance storytelling and generate scholarship from the grant program.

Phase 1.2: Student Learning Gains

The team engaged in descriptive analysis of a sample of 48 student grant final reports to identify project affiliation and type, the average number of students involved per project, and the average amount awarded per project. Additionally, the following two open-ended prompts were analyzed from the deidentified sample set of 48 final reports, using content analysis to identify student learning gains and the connection (or not) to enhanced understanding of our land-grant mission:

1. Role and how many people benefited from the project, learning activities in project, and the major objectives completed by the project.
2. Suggestions for improving a similar project in the future.

We followed an inductive approach to create and group codes into categories of relatable content, and ultimately into overarching themes based on patterns involving the re-allocation of codes and redefining categories iteratively (Kohlbacher, 2006). Through

multiple coding steps and discussions, we established a high level of researcher code agreement and a resulting qualitative codebook of six student learning gains from the qualitative data.

Findings

Phase 1.1: Grant Program Administration Results

The team found the grant application lacked crucial information. For example, grants are open to students systemwide; however, our original application did not allow students to indicate whether they were from the regional campuses. Furthermore, all student project members were not required to submit their contact information, thwarting us from tracking their participation in the program over time and conducting further in-depth surveying.

Additionally, although the application portal and database are critical components of our program that allow us to measure the impact of the grants, we observed several weaknesses, such as the application portal timing out too quickly, as well as the application template not capturing data on all students or units represented in a project. These oversights cause us to lose important data that could be used to strengthen the grant program, enhance the experience of project participants, and increase community impacts. Lastly, grant application language surrounding travel, donations, equipment, and materials was assessed for clarity and compliance with our business office. Future meetings are planned with key business office staff to address inconsistencies.

Phase 1.2: Student Learning Gains Results

Descriptive analysis of the final report sample revealed that the sample grant projects involved an average of 13 students with \$997.00 awarded per project on average. Projects in the sample were most often affiliated with service-learning courses (56%). Other affiliations included student organizations (23%) and study abroad (4%), with an additional 17% unaffiliated. Furthermore, projects in the sample were distributed across six categories: community support resources (33.33%), education (31.25%), community innovation/math/engineering (12.50%), animal health (10.42%), health care (6.25%), and veteran or elderly care (6.25%). However, it should be noted that the measurement of grant project

applications is not a holistic measurement of all service-learning occurring on campus, as not all service-learning courses require grant applications. Additionally, no formal campuswide tracking system is mandated for service-learning participation.

The content analysis of responses to Prompt 1 (“role and how many people benefited from the project, learning activities in the project, and the major objectives completed by the project?”) revealed emergent themes that suggested gains in the following six areas: knowledge; problem-solving skills; experience with analysis, synthesis, and application; discipline-specific skills; civic engagement and/or civic-mindedness; and community impact (Appendix A). Students most frequently mentioned gains in community impact from their grant project, closely followed by knowledge gains; civic engagement and/or civic-mindedness gains; and gains in experience with analysis, synthesis, and application. As the service-learning grant program is open to projects diverse in discipline and scope, each project is unique. In turn, results from the content analysis indicated a range in the number of areas showing gains per project represented in the sample, with some final reports indicating more than one area of growth.

In addition, the analysis of Prompt 2 (“suggestions for improving a similar project in the future”) revealed five different areas in which students seek growth and improvement in their grant efforts (Appendix B). Students most frequently cited an interest in modifying the project results based on the project experience. They also expressed interest in increasing their impact and outreach efforts, increasing communication between project partners, increasing flexibility in the project modality and timeline, and having the ability to modify their grant application in the database.

Implications

As the authors of this article are experiencing considerable changes at the university—new administrative leadership, unit restructuring, and an increased emphasis on research—it is imperative that the grant program be reenvisioned with careful intent not only to maximize program efficiency, but also measure programmatic outcomes such that the impacts and value of the program can be easily communicated to and understood by decision makers.

Not only did the content analysis reveal positive learning outcomes for students in alignment with the findings of Celio et al. (2011), it also helped identify further potential for growth in the following areas: administration of grants, including data collection, reporting, and evaluation; deepening student learning gains as they relate to our land-grant mission, engagement, and civic-mindedness; and measuring community impacts.

Next Steps and a Promise for Sustainability and Impact

Grant Program Administrative Improvements

During the 2022–2023 academic year, our team became a service-learning partner and collaborated with a course in data science to create a revised grant application, a new grant submission and application review database, and a data reporting dashboard. The objectives of the project were as follows:

1. Develop a new web application for the grant program.
2. Extract, transform, and load data from the current database into a new database.
3. Design and create an interactive dashboard for data visualization.

The website, a database schema, and server for storing student applications was developed and the grant application prompts were expanded to report opportunities and collect more in-depth student information, such as student identification number, year of study, and contact information for all student applicants. The goal was to increase our understanding of the students we are reaching and make it easier to connect with students postgraduation.

Deepening Student Learning for Our Land-Grant Mission

To increase students' knowledge and awareness of engagement and its linkage to the university's land-grant mission, we plan to integrate a video on these topics into the grant application process. Student applicants will be required to view the video prior to submitting their grant application. To assess the effectiveness of this intervention, we are developing a pre/postvideo and post-project questionnaire to measure change in

knowledge and awareness of engagement throughout the project. Moreover, although our original grant reports allow students to reflect and indicate improvements to their projects, there is an opportunity to improve the quality and specificity of this line of questioning to better support critical reflection and improve students' abilities to demonstrate their learning.

Capturing Impacts and Evaluating Outcomes

Lastly, service-learning programming must take a critical approach to ensure reciprocity between campus and communities (e.g., Davis et al., 2019; Gregorova & Heinzova, 2019; Hudgins, 2020; Strait & Lima, 2023). Our team recognizes the importance of measuring impacts beyond student learning gains. We are working on an evaluation plan to effectively assess and capture additional programmatic impacts on both community partner sponsors and faculty mentors.

The team also acknowledges that in order to maximize community impacts and reciprocity, staff and faculty should not only reach out to community partners to share information, disseminate resources, and provide assistance, but they should also work to solicit feedback from community partners (Welch & Saltmarsh, 2013), which reaffirms the value of our efforts to extend critical service-learning to the measurement of community impact.

Conclusion

Our work to reimagine the Purdue Service-Learning grant program is part of a larger effort to enhance and normalize engagement across the university as the OoE navigates institutional restructuring and the higher education landscape is redefined daily (Boggs et al., 2021; Post et al., 2023). Through our analyses, we have uncovered new areas of potential growth in our grant program, including data collection, reporting, and evaluation, that will allow us to improve both the student and administrative experience of the grant program, as well as enhance student learning gains as they relate to our land-grant mission. Furthermore, our goals of a well-developed evaluation plan will support a deeper understanding of community impacts and ways in which we can enhance reciprocity.



About the Authors

Dr. Lindsey Payne is an associate professor of practice and the former director of service-learning at Purdue University. Her research sits at the intersection of sustainability, teaching and learning, and engagement, focusing on transdisciplinary decision-making in community-engaged design. She holds a PhD in ecological sciences and engineering from Purdue University.

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Appendix A. Themes From Prompt 1 of the Final Reports

Role and how many people benefited from the project, learning activities in the project, and the major objectives completed by the project?

Theme	Definition	Excerpt examples	Frequency (# of reports)
Community impact	Community impacted through the completion of the project	"Our group of students completed direct service benefiting over 100 people. We worked with [organization] in the neighborhood of [city]. Altogether, we helped clean and paint at [organization] building where men and women stay."	44
Knowledge gain	Knowledge gained through the completion of the project	"I met people from different religions, with different sexual orientations, from different countries, [redacted] people from low-income communities, each of them with a different story but with the same purpose for being there: they want what's best for their pets."	37
Civic engagement and/or civic-mindedness	Civic engagement and/or civic-mindedness demonstrated through the completion of the project	"It was incredible to contribute to building something for the community and taking a hands-on approach to projects and repairs that were greatly needed."	37
Experience with analysis, synthesis, and application	Experience with analysis, synthesis, and hands-on application of knowledge demonstrated through the completion of the project	"We took our learning from earlier in the semester of creating personal audio narratives, paired it with more knowledge we obtained about techniques for interviewing people, and applied it to our project."	37
Discipline-specific skills	Skills related to a specific academic discipline gained through the completion of the project	"Four [university] pharmacy students visited 12 pharmacies throughout the state of [state] monthly during October–December to assist with the pharmacies' transitions from a dispensing model to a patient-centered model."	29
Problem-solving skills	Problem-solving skills gained through the completion of the project	"The second class allowed the students to gain experience applying the EDP [engineering design process] to a problem of their interest. Students used their knowledge from the previous class to inform the steps to complete the engineering challenge."	22

Appendix B. Themes from Prompt 2 of the Final Reports

Suggestions for improving a similar project in the future			
Theme	Definition	Excerpt examples	Frequency (# of reports)
Modify output based on response/results	Modify some of the project results based on responses/results during the process of conducting the project	“For more advanced students studying middle school science, some portions of the lessons would be removed to make the lesson a bit more challenging. The quiz that was created would also be a bit more in-depth.”	23
Increase outreach/impact	Increase impact/outreach based on the results from conducting the project, i.e., including more team members, resources	“We hope to create a flyer next semester to send to local businesses and surrounding area council members in order to gain more clients. In addition, we would like to keep increasing the opportunities for undergraduate students to get involved with [campus organization] activities.”	17
Increased feedback or communication from instructor or community partner	Increase feedback or communication with course instructor and/or their community partner	“To improve this project, I would suggest more regular communication with the community leadership to make sure the system usage information is updated more regularly as it has implications for future improvements to the implementation process.”	7
Flexibility in modality and/or timeline	Adapt the project methods for remote working and/or allow for longer timelines	“A lot of planning and logistics went into putting these kits together. Our timeline had to shift multiple times since we were not able to gather in groups to put things together and assembling them for the eLearners was a lengthy process.”	4
Modify grant program	Components of the grant program should be modified	“Grant submission form is buggy; I was logged out unexpectedly while documenting costs twice (one of which occurred after the action of checking the ‘Acceptance/Signature’ box).”	1