

WHAT IS THE LONG-TERM, REAL-WORLD VALUE OF CBL?

Assessing Impact from the Perspective of Former Students

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Abstract

This study examines the post-course impact of community-based learning (CBL) on undergraduate students enrolled in a CBL course from one of four undergraduate degree programs at a large, public university. Mixed methods analysis of survey and interview data show that CBL experiences supported holistic development for students, including in the areas of civic, personal, professional, and academic growth, while also highlighting the value of team- and project-based CBL and “real-world” skill building. Results also show faculty experience significantly affects students’ perceived outcomes.

This article examines the perceptions of former students about the long-term value of community-based learning (CBL). While universities frame CBL as a high-impact, experiential pedagogy that creates mutually beneficial outcomes for students and communities (AAC&U, 2019; Holland & Robinson, 2008), research that examines the longer-term impact of CBL on student development is still needed (Carlisle et al., 2017; Clayton et al., 2013; Finley & McNair, 2013; Hatcher et al., 2017; Kiely, 2004). By building upon prior research on the long-term value of CBL (Battistoni & Mitchell, 2018; Hill et al., 2017; Ruiz & Warchal, 2013), this study is intended to help institutions design transformational learning experiences that last (Clayton et al., 2013; Finley & McNair, 2013; Kiely, 2004; Merrill & Pusch, 2007). In particular, this study examines the long-term impact of CBL on students from across four undergraduate programs and 18 sections of courses taught between 2013 and 2017 at a Masters Large, public, comprehensive liberal arts university in the US Midwest.

We address three research questions. First, what do former undergraduate students perceive as the long-term impact from their community-based learning courses? Second, in what ways have they found lessons learned or skills developed to be of value in their civic, personal, professional, and academic lives? Third, what are their suggestions for improving the impact of CBL courses? To answer these questions, we apply a mixed method approach to analyze former students’ perceptions using data gathered from a structured online survey and follow-up phone interview.

This study makes multiple contributions to the CBL literature. First, by building upon prior work examining deep learning (Ibrahim et al., 2016; Nelson Laird et al., 2008) and the post-course impact of CBL (Battistoni & Mitchell, 2018; Mitchell et al., 2013), this study confirms the value of CBL for personal, professional, and civic life post-graduation while also highlighting the challenges experienced during and since the course. Participants reported the most long-term benefit from aspects of the experience that they considered to be the most challenging at the time. Second, this study affirms and complicates earlier findings that indicate CBL benefits from reflective, relational, scaffolded project- and place-based learning experiences. Third, the data also show faculty experience significantly impacts students' long-term perceptions of the CBL experience, complicating any discussion of improving the impact of CBL courses on students' long-term outcomes. With our findings in mind, we provide recommendations for improving the long-term impact of CBL.

The following sections provide a brief review of the literature, description of the research design and methods, presentation of the findings, discussion of the implications and limitations of the results, and recommendations for future research.

Literature Review

From short-term, quantitative studies, toward longitudinal mixed methods approaches

There is substantial evidence supporting CBL and project-based methods as effective pedagogical tools (Gillies & Boyle, 2010; Hernandez et al., 2015; Johnson et al., 1998; Nowrouzian & Farewell, 2013). A number of studies and meta-analyses have consistently shown such practices support students' academic achievement (Kuh, 2008; Lockeman & Pelco, 2013; Reed et al., 2015), civic awareness and engagement (Deeley, 2010; Miller & Gonzalez, 2009), and professional and personal development (Barbee et al., 2003; Mueller, 2005).¹ A significant amount of research also highlights the challenge implementing deep CBL within dominant structures, processes, and culture of academia (Battistoni, 2014; Wallace, 2000).

While a long line of research has corroborated the more immediate value of CBL pedagogies, studies examining the longer-term merit are still needed (Astin et al., 1999; Hill et al., 2017; Hoover-Plonk, 2015; Kiely, 2005).² Indeed, a recent meta-analysis examining the scholarship emerging from three leading teaching and learning journals concluded that fewer than 9% of studies in the scholarship of teaching and learning (SOTL) literature examined longitudinal outcomes (Divan et al., 2017). Given that intellectual growth and development take time, the impact of CBL cannot be captured over the duration of a single semester, and longitudinal studies are essential (Battistoni, 1997; Colby et al., 2007). As Bennion and Dill (2013) have noted, if the goals of civic education are to foster skills and knowledge for supporting community goals, then researchers need to measure former students' "perceptions, attitudes, and skills" *years later* (p. 430).

1. For additional evidence the reader can also review Astin et al. (2006), Celio et al. (2011), Eyler et al. (2001), and Novak et al. (2007).

2. While Carlisle et al. (2017) have identified trends over time in outcomes using the Community-Based Learning Impact Scale, they did not intentionally attempt to assess the persistence of outcomes over time.

With the current status of CBL research in mind and a commitment to understand the long-term “real-world” value of CBL courses in different disciplinary contexts, we chose to review longitudinal studies examining the impact of CBL as well as research on deep learning. According to Nelson Laird et al. (2008), deep learning encourages students to explore their commitments in relation to the course. In alignment with CBL, deep learning requires the application of course content to real situations along with consistent reflection, integration, and synthesis. Their study on deep learning was of particular interest because they also sought to understand whether and how courses across disciplines impact students’ personal, professional, and civic commitments and relationships. Their study examined data from over 80,000 college seniors and 10,000 faculty, uncovering that deep learning practices increased students’ personal and intellectual development and their satisfaction with the course but that it was more likely to occur in some disciplines than others.

We found that longitudinal CBL studies both confirm findings from shorter-term studies and provide new insights about the value and impact of CBL. Raykov and Taylor (2018), for instance, surveyed over 400 students and conducted 45 follow-up interviews over a 15-year period, tracking the effects of CBL on students’ aspirations and life after graduation. Their results indicated that former students felt their ability to understand vulnerable populations and to work effectively with others was enhanced by their CBL experiences. They also found that over half of participants felt the experience significantly impacted their career goals and increased their commitment to work with communities. Carlisle et al. (2017) surveyed almost 200 students via the Community-Based Learning Impact Scale (CBLIS), also finding that CBL increased former students’ sense of civic responsibility, ability to work with others, and professional skill sets.

A number of comparative longitudinal analyses have similarly shown that students enrolled in CBL opportunities were more empathetic, committed to engagement, and interested in diverse relationships than control groups (Hill et al., 2005; Ryan, 2017). Particularly relevant to our own curriculum and our study findings, Alexander et al.’s (2020) multi-year comparison study within a health service program found that team-based CBL yielded particularly valuable outcomes, improving engagement, knowledge, and skill acquisition.

Battistoni and Mitchell’s (2018) longitudinal, mixed methods study complicates these earlier findings. While they also find that alumni were consistently and intentionally incorporating their civic identities and values into their lives and workplaces, they find a tension between alumni’s desire to be engaged in civic and community issues and their personal and professional responsibilities. Their study included surveys, focus groups, and in-depth interviews with almost 400 alumni 5 or more years post-graduation (Mitchell et al., 2019).³ While survey analysis showed a commitment to civic engagement, interviews and focus groups revealed alumni felt challenged to find time and space to engage and wished they were directly involved in civic and political activities (see also Mitchell et al., 2019). Their findings indicate such programs foster significant individual awareness and a desire for broad civic engagement but that barriers related to time and reach make formal engagement in civic spheres post-graduation challenging (Battistoni & Mitchell, 2018). They build upon prior research, drawing a correla-

3. Their surveys were created by integrating findings from previous research on SLCE (Hatcher, 2008) with questions that emerged from an initial analysis of their interviews. The survey integrated items from the Civic Minded Professional scale with questions that focused on how alumni have integrated CBL practices into their work and larger life (Mitchell et al., 2015).

tion between the need for consistent reflective-praxis across longer-term CBL experiences and a more fully developed sense of civic identity post-graduation (Mitchell et al., 2015).

These recommendations align with those of Saltmarsh et al. (2015), who suggest that deep, pervasive, and integrated community engagement should be established across programs and institutions. However, Hoover-Plonk (2015) complicates these findings. She interviewed former students 6 to 9 years after their CBL experience and found that even short-term co-curricular trips appear to have a strong influence on civic behaviors and attitudes, especially around issues of social justice.

Thus, research on CBL should be seeking to explore not only what valued outcomes persist but also *how* those outcomes were fostered and the challenges overcome. Mixed methods, longitudinal research is one channel for understanding what causes the outcomes observed by quantitative studies (Divan et al., 2017; Hatcher et al., 2017). A second pathway, also explored in our study, examines the impact of disciplinary frameworks, CBL training, and faculty experience in implementing CBL methods. These are particularly important, as CBL methods add extra responsibilities, complexity, and consistent challenges to the educational experience (Arantes do Amaral, 2019; Wallace, 2000).

Theoretical Framework and Methodological Approach

Given our (a) desire to contribute to the development of relevant research practices and findings in the field, (b) similar theoretical and practical commitments between our own CBL practices and those of Mitchell et al. (2019), and (c) similarities and differences between the design of their programs and our own courses, we chose to largely model our study after theirs while integrating questions on deep learning from Nelson Laird et al. (2008). In particular, we were interested in exploring how our CBL courses yielded deep learning that built students' civic and professional capacities.

We valued how the three programs analyzed in Mitchell et al. (2019) and Mitchell et al. (2011) were committed to fostering civic identity and agency, understood as the development of commitments “to the fundamental values of diversity, social justice, and active citizenship” (Mitchell et al., 2011, p. 117). Informed by Longo and Gibson (2011), Boyte (2008), Knefelkamp (2008), and Colby et al. (2007), they argue that fostering civic identity and agency through CBL requires that educators situate social issues in their historical and social complexities, engage students in relationships over time with diverse others, and ask students to apply their knowledge and skills to social challenges through collaborative reflective-praxis. In order to support the development of students' civic identity and agency, all three programs in Battistoni and Mitchell's (2018) study required scaffolded and extended community engagement designed to support relational, project-based learning and the development of leadership skills.

Following their survey design, our own survey integrated the Program Participation, Personal Attitudes, Traits, and Skills, as well as the current work life scales, adapting the sections slightly to fit our course and program-specific context. We also included survey questions from Nelson Laird et al.'s (2008) study because we

wanted to understand whether our courses yielded deep learning. Of the 14 questions asked on their “Assess HIP Implementation Quality” survey, we integrated four directly and modified three to fit the CBL dimensions of our study.⁴ In finalizing survey questions, the research team consulted with a focus group of recent alumni from our programs.⁵ The final survey asked students to reflect on how their CBL experience affected their perspectives and personal and career choices, how helpful the CBL course has been since graduation, whether they maintain relationships with classmates, and how the course could have been improved (to review the survey questions analyzed in our article, see Appendix A).

Survey and follow-up interview recruitment occurred over the fall of 2018 with data analysis occurring early in 2019.⁶ Interviews were semi-structured, designed concurrently with the survey to probe more deeply than the survey into the why and how. The survey and interviews sought to examine not only the impact of CBL experiences on students then and now but also why and how they felt these outcomes emerged. The interview questions allowed former students to explain their experience and perspective, which proved valuable in providing additional detail and clarity on the open-ended survey data. Like these instruments, ours assessed former students’ perceptions of the impact and value of their CBL experiences. The survey items and interview questions were pilot tested with a focus group of former students who participated in a CBL-based project, but in a course outside our sample for this study. The interview questions and question ordering are included in Appendix B. The interview prompted recall of the experience, then elicited the beneficial aspects of the course, alignment with and impact on values, challenges of the course, engagement with the course and peers, connections between the respondent’s CBL experience current career/job, and current activities related to issues of social change and social justice.

Interview transcripts were analyzed and coded separately from the open-ended survey data. Team members and two external, independent reviewers analyzed the transcripts through a constant comparative method (Merriam, 2009), reviewing each transcript for relevant segments of text, completing notes on emerging themes, coding the text using open coding with Excel spreadsheets, and grouping the related codes into themes. We then met to discuss findings and generate shared themes across interviews (Kvale, 1996). Team members then discussed the separate analyses, came to consensus on the themes, and compared findings to the quantitative survey data. The two external reviewers’ analyses confirmed the team’s analysis, showing congruence on the themes of both the open-ended survey and interview data.

4. The four questions used directly were “This course challenged me to examine the strengths and weaknesses of my own views on a topic or issue,” “This course encouraged me to use my personal experiences to understand concepts and facts,” “This class encouraged me to interact with people from different backgrounds and cultures,” and “This class included perspectives of peoples from different backgrounds and cultures.” Adapted questions included “This course encouraged me to use concepts and facts that I learned in the course by applying them to new situations,” “The community work I did in this course helped me to gain a better understanding of course concepts and theories,” and “The assignments and/or activities in this course have helped me to form friendships with others in the course.”

5. Given feedback from the focus group and the central aims of our study, we chose to reduce the time needed to complete the survey by removing the psychological and social well-being and civic activities sections.

6. Human subjects review approval was granted in the summer of 2018. The survey was available to respondents in September and October 2018. During the survey, respondents were able to volunteer for interviews, with interviews immediately following, starting in November 2018. Analysis of the data followed into 2019.

By building our own study upon these earlier studies, we hoped to extend the understanding of the value and challenges of program and course-based CBL across disciplines. Allowing for potentially interesting comparisons, one of the four programs examined in our study required CBL opportunities that move beyond the course-based model.

Context: Program and Course Descriptions

Our research team elicited data from all students enrolled in one of 18 course sections taught over a span of 5 years across four degree programs: accelerated leadership, interdisciplinary general education, social work, and economics. These programs and course sections were chosen based on programmatic and faculty commitment to evaluate the long-term value of CBL. Three faculty members' courses were included, one each from economics, interdisciplinary studies, and social work. All were full-time, tenure track faculty with PhDs in their disciplines and had between one to 5 years of experience with CBL pedagogies. Faculty also represented different social identity categories, including one White-identifying woman and two men (one Asian and one White). There were both a range of differences across the courses in the study (course level, year, duration, student population, and learning objectives) and striking similarities in the approaches to CBL (all courses required team- and project-based CBL in which students gathered data and used it to create new knowledge). They all also required students to conduct site visits, complete reflective writing assignments, give presentations, and submit a final project report. The courses also shared a number of learning objectives including having students analyze and apply course content, engage in practice-informed research and research-informed practice, communicate findings, and suggest future actions to community members. Tables 1 and 2 present a comparison of some of these course features, with additional program details in Appendix C.

Analysis and Results

This section presents the findings from the quantitative survey questions, open-ended survey questions, and phone interviews.

Data Collection

We used purposive sampling in that to be eligible, participants must have enrolled in one of the CBL courses under review. We recruited these former students 1 to 5 years after they had completed the CBL course through an email that included a link to the survey questionnaire. The enrollment for each of the 18 course sections ranged from 15 to 30 students, with a total theoretical population of 295 students. We received 76 completed surveys for a response rate of 26%.⁷

7. The host institution emailed two invitations to the targeted participants in adherence with internal rules regarding privacy of academic records. No other recruiting of participants was permitted.

Table 1
Overview of Cross-Course Comparisons

Course characteristics	Accelerated leadership	Interdisciplinary general education	Social work	Economics
Course level	Sophomore	Junior	Junior	Senior
Course type	Program requirement	General education	Major requirement	Major requirement
Course duration	5 weeks accelerated	15 weeks	15 weeks	15 weeks
Course size	15–22 students	20–30 students	15–30 students	25–30 students
Course audience	Adult cohort	Traditional	Traditional	Traditional
CBL process	Collaborative / team based	Collaborative / team based	Collaborative / team based	Collaborative / team based
CBL partners	School system & nonprofit	Nonprofit	Nonprofit	Nonprofit
Student learning objectives	<ul style="list-style-type: none"> • Diversity • Intergroup dialog 	<ul style="list-style-type: none"> • Dialog skills • Collaboration • Integration • Problem-solving 	<ul style="list-style-type: none"> • Engage • Assess • Plan • Implement • Evaluate 	<ul style="list-style-type: none"> • Data & economic analysis • Writing • Collaboration • Problem-solving

Table 2
Overview of Course Requirements and Projects

Course characteristic	Accelerated leadership	Interdisciplinary education	Social work	Economics
Project based	X	X	X	X
Site visits	X	X	X	X
Guest lecturers	X	X	X	X
Reflective writing	X	X	X	X
Presentations	X	X	X	X
Report writing	X	X	X	X
Community dialog	X	X	X	

We found that from 2013 to 2017 students in majors of social work, liberal studies, and economics had a different distribution of demographics than the university in general. Of the students in those programs, 80.1% identified as female and 19.8% as male with 0.1% not reporting, while the university numbers were 59.6% female and 40.4% male with less than 0.1% not reporting. These programs also supported older and more ethnically diverse students, with 77.3% of the students in these programs identifying as White, 9.5% African American or Black, 5.9% Hispanic or Latino, 1.7% Asian or Pacific Islander, and 5.6% another racial/ethnic identity. Across the university the distribution was 83.1% White, 5.3% African American or Black, 4.7% Hispanic or Latino, 2.7% Asian or Pacific Islander, and 4.2% another affiliation. Among students with these majors, 61.6% are aged 24 years or younger and 38.4% aged 25 years or older, while at the university overall 82.3% were aged 24 years or younger and 17.7% aged 25 years or older.⁸

8. Over this period 49.8% of university faculty identified as female and 50.2% as male. About 82.3% of university faculty identified as White, 3.7% African American or Black, 3.2% Hispanic or Latino, 7.8% Asian or Pacific Islander, and 3.0% another affiliation.

The anonymous 10-minute structured online Qualtrics questionnaire consisted of 17 statements designed to elicit participants' perceptions of CBL's impact across personal, civic, professional, and academic domains. Respondents indicated their level of agreement to each statement on a 5-point Likert scale (e.g., "I was exposed to new ideas and ways of seeing the world" and "I created a plan to address the problem"). Responses were converted to binary outcomes. For example, for questions asking for agreement or disagreement, answers *agree* and *strongly agree* were set equal to 1 and the other responses set to 0. Thus, averages and standard deviations reported are given in percentages of respondents responding affirmatively to the question. Additionally, we asked participants to respond to four open-ended questions at the end of the survey that asked them to highlight the most important elements of the course and what things they wish the course would have included to improve their learning. Each research team member independently applied content analysis to review the open-ended survey responses for relevant segments of text, coded the text using open coding, and grouped the related codes into their respective themes. Team members met to discuss their analyses and reconcile discrepancies.

Participants who completed the survey questionnaire were asked if they were willing to participate in a 20- to 60-minute semi-structured, follow-up phone interview to further clarify their responses, offer specific examples, and describe the impact of their CBL experience. Of the 76 completed surveys, 13 respondents volunteered for and participated in the phone interviews. To reduce potential for bias, a research team member who did not teach any courses included in this study conducted the interviews and de-identified the interview transcriptions. Each interview was audio recorded, transcribed using denaturalized transcription, and then deleted. Survey questions and interview questions have been included in Appendices A and B.

Quantitative Survey Findings

Mitchell et al. (2015) explicate results from the survey we adapted, allowing us to compare findings between our studies. For example, when reflecting on the helpfulness of program-related activities, their respondents said "discussions with program faculty, advisor" and "informal dialogue with other students" were most valuable, ranking these opportunities as a 6.2 on a 7-point Likert scale on average. Similarly, our respondents ranked the instructor (95.8%) and other students (87.1%) as the most important variables in their CBL experience. They used their results to examine the value of reflection, correlating the helpfulness of program reflection and the helpfulness of current life reflection to their current civic identity and calling. In contrast, we asked former students to focus more on the CBL experience itself, with 82.7% of respondents agreeing or strongly agreeing that it "influenced (their) career choices." Mitchell et al. similarly found that "many alumni located their civic and political engagement in their jobs, with 26% reporting employment in the government or public sector and another 51% in the nonprofit sector" (p. 52). Fifty of our 76 respondents classified their employment using these categories. Of those who responded, 16% work in government or the public sector, 20% in the nonprofit sector, and 64% in the for-profit sector. An additional three reported as not employed and nine as "other." Compared to those responding to Mitchell et al., our respondents were more heavily employed in the for-profit sector following graduation.

Table 3 summarizes survey question statistics.⁹ Despite differences in the student populations, faculty, and CBL projects across the courses, the sample statistics show participants reported similar outcomes across multiple domains and issues. In terms of personal and civic development, 88% ($n = 75$, $SD = 32.7$) of respondents indicated the CBL experience provided new ways of seeing the world, 81.7% ($n = 71$, $SD = 39.0$) that it increased their understanding of how to affect their community, and 67.6% ($n = 75$, $SD = 47.9$) that it allowed them to make an impact on their community. For outcomes classified as professionally oriented, 85.9% ($n = 71$, $SD = 35.0$) of the respondents reported the course helped them identify the source of a problem, and 77.5% ($n = 71$, $SD = 42.1$) reported the experience helped them learn to create a plan to address the problem. With respect to academic outcomes, 88.0% ($n = 75$, $SD = 32.7$) of respondents indicated the course helped them understand course content, and 88.5% ($n = 75$, $SD = 35.6$) indicated the course improved their skills and/or competencies. The respondents from across the courses reported statistically similar impacts on their learning from community members (75.4%; $n = 69$, $SD = 43.4$), site visits (84.1%; $n = 69$, $SD = 36.9$), other students in the course (87.1%; $n = 70$, $SD = 33.7$), and the instructor (95.8%; $n = 71$, $SD = 20.3$).

The last column of Table 3, “Diff,” shows there were substantial differences in responses across the degree programs in terms of student outcomes. This column contains the results from a multiple pairwise test across the four programs using a Bonferroni one-way multiple comparison test. An entry of “Y” indicates there are between-group differences in the means using a 5% significance level from the resulting F -test. For example, in the “professional” section of Table 3, the item “Create a plan to address the problem” had means ranging from 60.0 to 84.0. Based on the multiple comparison test, none of these means are statistically different. In contrast, “Locate and analyze power around the issue” had means ranging from 41.7 to 88.0, and the “Y” in the “Diff” column indicates at least one pair of the means are statistically different. The test was not applied to the question about the role of the instructor (under Academic), as there was no variation in the data for three of the four groups.

The “Diff” column results allow us to investigate how students’ experience differed, on average, across the courses. In the area of civic development, respondents from both interdisciplinary general education and accelerated leadership courses reported being more likely to discuss politics with diverse others as a result of their CBL experience, compared to respondents who were enrolled in the other courses. Respondents who took the interdisciplinary general education courses were more likely to report their CBL course increased their confidence in making a difference in their community. For concepts or outcomes in the personal category, respondents who took the accelerated leadership courses were far more likely to report the course changed their beliefs and attitudes about themselves compared to the social work and economic course respondents. In terms of the CBL course affecting their social identities, economics students reported impacts significantly below those reported by students in the other disciplines. In the professional domain, respondents who took the interdisciplinary general education courses were more likely to report their CBL course impacted their career choices, whereas economics students reported a significantly lower impact of the CBL experience in affecting their ability to analyze

9. Quantitative analysis was primarily done in Stata (StataCorp, 2017).

Table 3
Summary Statistics

Concept/outcome	AL	IGE	SW	ECO	Overall	N	Diff
Civic							
Increased how frequently I listen to and discuss politics with people whose opinions may be different from my own.	68.4 (47.8)	72.0 (45.8)	26.7 (45.8)	41.7 (51.5)	56.3 (49.9)	71	Y
Increased my confidence in my ability to make a difference in my community.	68.4 (47.8)	96.0 (20.0)	60.0 (50.7)	66.7 (49.2)	76.1 (43.0)	71	Y
Increased my understanding of how to affect my community.	89.5 (31.5)	92.0 (27.7)	73.3 (45.8)	58.3 (51.5)	81.7 (39.0)	71	
I made a contribution to the community beyond the campus.	80.0 (41.0)	66.7 (48.0)	53.3 (51.6)	53.8 (51.9)	65.3 (47.9)	75	
Personal							
I re-examined my beliefs and attitudes about myself.	95.0 (22.4)	74.1 (44.7)	73.3 (45.8)	30.8 (48.0)	72.0 (45.2)	75	Y
I was exposed to new ideas and ways of seeing the world.	90.0 (30.8)	96.3 (19.2)	73.3 (45.8)	84.6 (37.6)	88.0 (32.7)	75	
Understand your own social identities (such as race, gender, social class, etc.)	85.0 (36.6)	81.5 (39.6)	80.0 (41.4)	46.2 (51.9)	76.0 (43.0)	75	Y
Professional							
Influenced your career choices.	75.0 (44.4)	100.0 (0.00)	73.3 (45.8)	69.2 (48.0)	82.7 (38.1)	75	Y
Identify the source/root of the problem.	95.7 (22.9)	88.0 (33.2)	80.0 (41.4)	75.0 (45.2)	85.9 (35.0)	71	
Create a plan to address the problem.	78.9 (41.9)	84.0 (37.4)	60.0 (50.7)	83.3 (38.9)	77.5 (42.1)	71	
Locate and analyze power around the issue.	63.2 (49.6)	88.0 (33.2)	60.0 (50.7)	41.7 (51.5)	67.6 (47.1)	71	Y
Academic							
Community members encountered during the course were important to learning.	77.8 (42.8)	80.0 (40.8)	71.4 (46.9)	66.7 (49.2)	75.4 (43.4)	69	
Site visits or other experiences outside the classroom were important to learning.	83.3 (38.3)	87.5 (33.8)	73.3 (45.8)	91.7 (28.9)	84.1 (36.9)	69	
Other students in the course were important to learning.	89.5 (31.5)	92.0 (27.7)	85.7 (36.3)	75.0 (45.2)	87.1 (33.7)	70	
Instructor (in the class setting) was important to learning.	100.0 (0.00)	100.0 (0.00)	80.0 (41.4)	100.0 (0.00)	95.8 (20.3)	71	N/A
Understand course content.	90.0 (30.8)	96.3 (19.2)	86.7 (35.2)	69.2 (48.0)	88.0 (32.7)	75	
Improve your skills and/or competencies.	90.0 (30.8)	92.6 (26.7)	73.3 (45.8)	76.9 (43.9)	85.3 (35.6)	75	

Notes. Responses to each question were coded as 1 for agree or strongly agree and 0 otherwise. Numbers reported are means with standard deviations in parentheses; standard deviations may appear high but are an artifact of the binary nature of the variables.

Columns contain results by program: accelerated leadership (AL), interdisciplinary general education (IGE), social work (SW), and economics (ECO).

The “Diff” column contains the results from a multiple pairwise test across the four programs courses using a Bonferroni one-way multiple comparison test implemented using the “oneway” command in Stata. “Y” indicates there are between-group differences in the means using a 5% significance level from the resulting *F*-test.

power around a problem. Results in the “Diff” column without a “Y” indicate concepts or outcomes for which the means across the four groups did not differ statistically.

Faculty member experience with teaching CBL also affects the student experience in ways that are reflected in our quantitative results. To better understand the variation in answers across participants from each degree program, we also analyzed the quantitative survey data using a regression-based analysis. The data showed a statistically significant difference in answers from students enrolled in the first semester a faculty member taught a CBL course compared to students who enrolled in that faculty member’s CBL course during subsequent semesters. Students enrolled in courses with faculty who had taught the CBL course prior were more likely to state they felt they contributed to the community beyond the campus (72.5% versus 45.8%; difference significant at the 5% level), understood course content (90.7% versus 76.0%; 10% level), improved their skills and/or competencies (91.9% versus 66.9%; 1% level), and could identify the source/root of a problem when addressing a community challenge or social issue (93.5% versus 66.8%; 1% level). In each case, Stata’s *xtreg* command was used to estimate the coefficient on an indicator variable for the first semester of a faculty teaching a CBL course, with controls for the panel-based nature of the data.

Open-Ended Survey and Interview Findings

Table 4 contains the frequency of themes and examples of representative quotes from both the open-ended survey questions and phone interviews. In order to best represent the depth and breadth of interview findings, quotes were pulled from a wide range of student interviewees, with over half of interview respondents providing direct quotes to explain our findings. The frequency of each theme is indicated in Table 4 using percentages, marked as “OES” (for open-ended surveys) or “I” (for interviews).

The open-ended survey questions asked respondents to identify elements from the course that they felt produced the most long-term impact. Of the 63 participants who responded to the open-ended survey question, the four most prominent themes identified were practicing skills applicable to their lives now ($n = 39$; 61.9%); engaging in real-world, hands-on learning ($n = 37$; 58.7%); getting out and being with communities outside the class ($n = 37$; 58.7%); and collaborating with peers ($n = 31$; 49.2%). The interviews asked participants what they remembered from the course, the biggest benefits and challenges they experienced during the course, and its impact on their life now. Thirteen survey respondents volunteered and participated in a 20- to 60-minute semi-structured follow-up telephone interview. The four themes identified from the interviews were largely congruent with those identified from the open-ended survey responses, further contextualizing insights surrounding skill building; getting out and being with the community; and engaging in real-world, hands-on collaborative learning.

Practicing skills applicable to their lives now

The interviewees’ statements supported findings in the literature, saying the CBL projects created long-term benefits across multiple domains. Similarly, the majority of interviewees emphasized that their CBL course culti-

Table 4
Thematic Examples From Open-Ended Survey and Interview Responses

Theme	Open-ended survey	Interview
Skill building OES = 62% I = 85%	[The course had a] direct connection to my role and how I could leverage my abilities to create change in our community. How to give others a voice and to amplify their voice, not speak for them.	[The course] gave me a lot of chances to interact with the community and meet with people. And actually run meetings with people . . . [w]hich has turned out to be pretty helpful in my current career in retail banking.
Getting out / being with the community OES = 59% I = 85%	The conversations we had with the community partners was the most important element of the course. I loved hearing ideas from people who were passionate about creating change here. . . . [The course] really helped me to see that small supports in the community can really improve the quality of life for real people right now.	For me, I think it was getting comfortable with talking to people in the community . . . and be able to have experience and understand what it's like working with people who are actually invested in the [community] as a job. So, it was very applicable, for me, anyway, the experience of being able to talk and have some understanding what's going on, and issues and barriers that are affecting children and families.
Real-world, hands-on learning OES = 59% I = 77%	Working directly with a real-world organization was very helpful in connecting us with the community.	You could see the real-world application of what you were doing, because of the CBL course . . . whereas in other courses, you questioned whether you would use the information.
Collaboration with students OES = 49% I = 54%	Working with the same group of people throughout the semester was something that produced a lot of benefits for me. It was difficult . . . because not everyone always got along or pulled their weight, but it taught me how to deal with that. . . . It was hard for me to trust other people with my grade like that but this course . . . made me realize other people are capable and can be trusted.	I would say [the most important aspect of the course was] learning to be a part of a team. . . . There's [<i>sic</i>] other people who have different ways of doing things and the way they do things is valid and maybe just as good at the way you think you should do it or it should be done.

Note. OES = percentage of respondents who indicated the theme in open-ended survey; I = percentage of respondents who indicated the theme during the phone interview.

vated skills valuable for their professional development, with over half of the participants mentioning leadership skills and two stating the CBL course directly helped them land their current jobs. One interviewee noted the value of the CBL experience as preparation for their current position: “I’m in a direct management role, which is something that I had never prepared for.” Another interviewee said experiences in the course helped them navigate both professional and family relationships and contributed to developing their leadership skills. Similarly, a survey respondent commented that “[a]s someone who is starting a small nonprofit, the networking and confidence building in our ideas was absolutely essential for my development.”

Survey respondents also highlighted the value of gaining experience in the community in ways that spoke

directly to building critically important skills and insights about their roles in the community. As one interviewee said, “I definitely feel a lot more competent working with different demographics, other people. It could be race, what socioeconomic class people are living in.” One survey respondent explained how her CBL experience inspired her and her family to remain connected to the community:

I never considered working within the community as an option for me. It sparked a new interest in my life and made me realize the power of giving back. I began to feel much more connected to others and see how important being involved with my community was for not only me but my family as well.

Engaging in real-world, hands-on learning and collaborating with peers

The interview responses reinforced the survey findings, highlighting the particular value, in hindsight, of CBL courses when compared to non-CBL courses. For example, one interviewee said:

A lot of my classes were all kind of, here are these book examples. It wasn't until the last semester, for me, that I actually met humans from an actual company, and we were actually going to do work with them. I think other classes would have benefited from that aspect of it. It would have made learning things easier.

The interviews also enriched the survey findings, indicating that the collaborative, real-world, and project-based nature of the CBL courses was foundational to their long-term perceived impact and value. One interviewee summarized the value of the collaborative work as particularly helpful in developing leadership skills:

This course actually was very helpful in multiple aspects. First of all we all had our own place within our group, we were all assigned to be a part of a group, and my part in that group was group co-lead, which then turned more into a leader later on, so definitely taught me some leadership skills, which is very important because I am in the process of founding a nonprofit.

Another interview subject explained the value of applying classroom learning in the real world:

[T]he community-based learning aspect of this course really gave me an applied way to practice, using all of these methodologies that I'd learned, drawing on this research, and drawing on that research skill set. And so it helped me apply it in a very real way that was hopefully going to have impact. So that was super reaffirming in that aspect.

These CBL-based courses also created opportunities for students to reflect on their positionality through the

projects undertaken. They clearly created space for analysis of one's own values in addition to completing the more tangible project. As one student said:

They were critical to helping me understand what I want to do in my future. And they were also critical in helping me learn more about the problems that I am passionate about and understanding various strategies that are creative, innovative, and just all around incredible in order to try to combat different pieces of those complex problems.

Similarly, for some students the CBL-based course was one of their first experiences with a professional activity for which the outcome of a project was both clear and substantial:

This is brand new to all of us, we're undergrads, we're mostly juniors, some of us seniors. We've never really had to face anything like this. So, it was brand new territory, very stressful. That was, to some, and most definitely to me, very nerve racking.

Distinct from practicing skills applicable to their lives now, many respondents discussed the learning that resulted from collaborating and sometimes experiencing conflict with their peers. The CBL experience created tensions and challenges in working with their peers that do not come up in the same way as a non-CBL-based course. One interviewee summarized the interaction in terms of within-group power and self-awareness:

Later on we had quite a power struggle between my social advocacy views and what our prototype was going to be like. In particular there was one other person I had an issue with. That definitely taught me how to be humble, but also stand my ground, and share my affirmations, and be passionate about something.

CBL learning and projects obligate students to grow in their interactions with their peers, coming to terms with interdependence in ways that students often avoid in non-CBL group projects. As one interviewee said, "I think it's critical for students who are trying to work within these messy and complex problems; I think it's crucial for them to try to find their way using their expertise as well as their teammates."

Getting out and being with communities outside the class.

Respondents also identified multiple benefits resulting from getting out and being with the community, often overlapping with the theme of the importance of the real-world, relational, and hands-on nature of CBL. Most respondents indicated their CBL course exposed them to issues they were relatively unaware of before, igniting a passion for engaging with others on certain social issues or deepening a commitment to issues they already cared about. One interview subject explained that although she was aware of social challenges such as food insecurity

and social justice, the CBL course opened her eyes to the complex nature of these issues. She reflected, “It was so rewarding to be more awakened to these problems and to understand that they’re really affecting most people in the world.” Another interviewee noted, “I volunteered at this time, but like, to actually understand, you have to walk alongside someone and really, really dig in deeper.” And another said, “Really this class was literally life changing for me. Even my husband said, ‘I’ve never seen this part of you.’ Like something had changed for me that semester.”

Interviewees explained how the impact of their experiences in the community allowed them to see the world from the perspective of people dissimilar from themselves. One interview subject explained:

I really consider this part to be the most useful . . . it kinda opened my eyes to the differences and inequality that people of color face when . . . trying to think of the fast way to put this . . . people of color face when they’re in an environment that’s not like themselves.

Differences

In general, commitment to civic engagement and social issues as a result of CBL involvement differed among interviewees. Most interviewees became more committed to civic engagement in general, developing an understanding of how to engage and make a positive impact on their communities. Some former students developed commitments to new social issues as a result of their CBL experiences, whereas others found that their commitment to the issues they cared about previously deepened as a result of their community involvement. A few of the interviewees also emphasized the long-term value they gained from deepening their understanding of the complexities of larger systems and developing connections across communities. One interviewee said, “I actually had like super mind-set change going from being in a corporate job to going to nonprofit work and community involvement. . . . [I]t completely changed my life and how I think about my role within the community.” They further explained:

I think it challenged my own insights and perspectives, but then also expanded my overall vision of community engagement, and it gave me a sense. . . . to be involved, to be a part of something, to act; you really have to listen, you have to understand, you have to challenge norms and you also have to actually do something. I think my old way of thinking to me was like, oh I volunteer one day a week, or I volunteered this time, but like to actually understand how you can help, you have to walk alongside someone and really, really dig in deeper; so, after I graduated, I went straight into working in a nonprofit, and I actually worked for and volunteered at several community organizations, and I still do. It just really opened my eyes on being a part of a community and what that means. It’s not just giving donations and volunteering once in a while, it’s actually being involved and being involved at a level that’s far deeper.

Recommendations

When asked what would have improved their learning in the CBL course, interviewees largely provided recommendations noted by previous studies, including a desire for additional time preparing for the CBL project, more opportunities to interact with the community and to form long-term connections, and more guidance in applying their experiences to their future goals.

Interviews also added new insights to previous research findings, showing strong linkages between the challenges of CBL-based experiences and the subsequent long-term value of the experience. This was particularly common in describing the challenges involved in getting out of the classroom, being with others, and the team-based nature of their work. One former student stated, “The biggest takeaways I had from that [were] getting the experience, talking to other people, and pushing myself beyond what I would normally do and outside of my comfort zone.” One interviewee explained that the community projects contributed to her understanding of the field of social work: “I feel like now that I’ve been working for a little bit and I’ve been a little bit more removed, in hindsight I see that there [were] a lot of benefits from it.” Looking back, this respondent especially emphasized the value of the “hands-on” learning, noting that the difficulties and frustrations ended up yielding skills for “not only macro work, but micro work” that helped them succeed in their subsequent courses and post-graduate life. This respondent emphasized that it was only in looking back with work experience that they could see how the class provided value.

Other interviewees noted that working on complex CBL projects as part of a team presented many challenges that ultimately contributed to developing leadership and collaboration skills as a result. For many, the team-based nature of the projects placed them in leadership positions for the first time. In addition, challenges presented by group conflicts and pressures yielded professional skill development that former students now find valuable. Another interviewee explained:

So, we were trying to take turns being a team leader. . . . I’m more of a follower, but my teammates were struggling to take charge, and I wanted to do well in the class. . . . I had to constantly take charge, so that taught me leadership skills. It put me out of my comfort zone, which has helped much more than in this class, it has helped me as an individual.

What appeared to be distinctive about the outcomes of inter-group challenges for these former students is that they produced leadership, communication, and collaborative skills that they had not experienced before. Many former students referenced teamwork as presenting a leadership opportunity in the interviews. A few students explained that they typically took control in class-based group projects but found that the community-based nature of the projects made them often too big or complex for one person’s personal locus of control. Therefore, a few students talked about how they learned to let go of control and rely on their team members to complete group projects.

There were also indications that faculty needed to stay in closer contact with CBL students during the project,

to provide updates on the work after the course ended, and to help learners understand the impact of their work. Study participants differed on how prepared they felt in navigating the challenges of collaborative, project-based learning with the community. One interviewee summarized their frustration:

When you're in a class like this, I understand the barriers because there's only so much that students can do and only so much time that the community partner has too. So there are no guarantees in that sort of exchange or interaction.

As one interviewee said bluntly, "I guess I felt like the professors were not [pause] like we didn't have enough guidance." Some desired more oversight and guidance, whereas others viewed the challenge of managing the project as essential training for the work they are doing now. Many interviewees saw direct connections to their current work, as one noted:

And so just knowing that I'd been through that type of conflict before and that I had all of the advice that I received in trying to manage that conflict, I think made me better at it, which is definitely serving me now as a manager.

Another said, "The skills that I learned while communicating with the public are exponentially better because of the course." Reinforcing the need for faculty to stay in contact with former CBL students and provide updates on the work, some interviewees noted they would value knowing about the outcomes of their CBL experience over the long term, whereas others assumed their project work yielded no long-term positive outcomes for their community partner, weakening their perception of the project's value.¹⁰

Discussion

This study sought to answer three questions. First, what do former undergraduate students perceive as the long-term impact from their CBL courses? Second, in what ways have they found lessons learned or skills developed as a result of their CBL courses to be of value in their civic, personal, professional, and academic lives? Third, what are their suggestions for improving the impact of CBL courses?

As prior studies have also shown (Battistoni & Mitchell, 2018; Carlisle et al., 2017; Raykov & Taylor, 2018; Ryan, 2017), former students valued their CBL experiences. This finding was consistent across academic disciplines, courses, instructors, and project types. They especially appreciated the opportunity to acquire skills and expand their perspectives, finding that this work was valuable to their life and careers post-graduation.

When asked about impacts related to academic growth, participants reported that CBL-based projects better

10. While formal interviews with community partners were not a part of this study, some partners were interviewed as a part of an earlier study. This finding was also corroborated via anecdotal evidence of positive organizational and community changes resulting from the faculty overseeing these projects.

supported their ability to acquire and retain course content compared to traditional classroom experiences. As found in Ibrahim et al. (2016), our respondents indicated that the course content supported and enriched their community engagement experiences and the community experience itself deepened their learning. As in Deeley (2010) and Miller and Gonzalez (2009), our respondents indicated their CBL work increased their understanding of how to affect their community, improved their ability to identify the source of problems, and helped them understand how to create plans to address these problems. In addition, respondents across programs reported learning from community members, site visits, other students in the course, and the instructor.

Our findings affirm and further situate recent research findings on a number of other fronts. Foremost, previous studies' findings indicating that engaged learning should exist across programs of study as a scaffolded, sustained, and reflexive praxis were reinforced by our findings (Battistoni & Mitchell, 2018; Kecskes, 2015; Saltmarsh et al., 2015). While former students consistently articulated a desire for continuing their work and deepening relationships, they still consistently found value in the course- and semester-based CBL experiences.

Our study also reinforced findings that survey data alone can be misleading. For instance, while both our closed and open-ended survey data indicated former students felt they were more engaged in community issues because of their CBL experiences, interviews revealed a strain between their daily personal and professional commitments and their desire to be engaged in social and civic issues. Interviewees, for instance, indicated that their CBL course motivated a deeper commitment to civic engagement but that they were not acting upon that commitment as much as they had hoped. This finding leads us to further emphasize the value of CBL that prepares students to explore systemic barriers and challenges to engagement as well as a diverse set of engagement strategies. CBL that visualizes systemic barriers and offers an array of strategies for disrupting oppressive systems could better support graduates as they navigate these challenges. CBL curricula could, for instance, visualize and map complex systems and power dynamics, situate the historical and geographic complexities, and require the critical reflection of the ethical and political challenges. Interested readers can explore a range of practices for supporting students, including the Interdependence Toolkit from the Community-Based Global Learning Collaborative, as well as emerging work in critical service learning, subversive service learning, and community-first and community-based participatory research (Campus Contact, n.d.).

While these prior studies emphasized the need for reflective dialogic praxis in long-term valued outcomes, our analysis also indicated that it was the real-world, hands-on, *collaborative* nature of the CBL experience that created both the greatest challenges and greatest long-term benefits. Respondents consistently placed high value on the skills they acquired through struggling with these real-world challenges together regardless of whether they were resolved successfully at the time. As a member of a team, students were able to negotiate roles in the context of their lives, skill sets, and education. Furthermore, the community-based projects created opportunities for students to be co-generators of initiatives that created positive changes in their communities. These findings support and extend previous research indicating that the collaborative, project-based nature of CBL experiences provide tools for supporting students' future endeavors (Schnaubelt & Coffey, 2016). Further efforts to examine the role of collaborative, project-based learning via longitudinal, mixed methods studies would be valuable.

Also extending past research findings (Kiely & Sexsmith, 2018), we found that faculty experience teaching with

CBL played a significant role in the long-term perceived value of the course. Students who enrolled in a CBL course during the second or subsequent semester that a faculty member employed CBL pedagogy were more likely to perceive positive long-term benefits. This is in line with our experiences, in that engaging students outside the traditional classroom through community collaborations presents several novel challenges for the faculty member. Extra responsibilities may include creating and nurturing mutually reinforcing feedback loops, encouraging experiential learning in situations visible to the broader community, supporting collaboration outside the classroom environment with non-students, and establishing and nurturing their own community connections (Arantes do Amaral, 2019). Our results indicate students perceive that faculty learn to navigate the challenges of CBL pedagogies quickly.

The data also show interesting disciplinary differences in perceived long-term benefits reported by participants that are worth future study. For example, as described above, students in the interdisciplinary and leadership-focused courses were more likely to report improvements in identifying the sources of complex problems and analyzing power dynamics. While we cannot precisely identify the causal factors, the differences in reported outcomes are consistent with the different focus across the courses. For example, the economics course primarily focused on application of professional technical tools for students at the end of their undergraduate college experience, whereas the accelerated leadership courses focused on the ethical complexities of community engagement and the examination of power constructs. This finding aligns with Nelson Laird et al.'s (2008) study on deep learning, which found disciplinary differences emerged between “soft” and “hard” fields (p. 470). Given the student variability across the four disciplines, such as student major and year, faculty expertise, academic discipline, type of CBL project and community partners, and course content and learning objectives, these differences are noteworthy but *not* surprising.

Indeed, it is perhaps more striking that former students reported (statistically) similar outcomes across so many domains. Indeed, the five questions in Table 3 for which respondents showed no differences across the experiences tells an interesting story taken together. Students from all four CBL courses reported similar rates of agreement in seeing the world in new ways (personal), understanding how to affect their community (civic), identifying the source of the problem (professional), creating a plan to address it (professional), and, ultimately, that they had made a contribution to their community through their CBL experience (civic).

The challenge of providing an adequate amount of time to maximize the learning and community benefit of CBL has long been noted in the service, leadership, and community engagement fields (Mabry, 1998; Wallace, 2000). The academic calendar, structures, and processes often inhibit CBL's potential for sustained impact, as CBL is often used with an individual course that occurs over a single semester. This challenge was identified by several of our participants, who mentioned that one semester was not enough time to support their projects. Specifically, they requested additional time for providing increased community interaction, nurturing long-term relationships, and grasping the impact of their collaborative work. About two-thirds of our participants reported making an impact on their community through their participation in the CBL course; however, several participants reported struggling to see the impact of their work, and a few others incorrectly assumed their work had little or no community impact. In addition, some interviewees, unsolicited, expressed a desire for opportunities to remain involved with the project beyond the course.

Our results and others in the literature indicate that the impact of CBL cannot be fully assessed by end-of-term evaluations alone or by quantitative survey metrics (Divan et al., 2017). Intentional programmatic efforts designed to provide opportunities (including for-credit coursework) for longer-term CBL projects; better communicate stories from student and community perspectives about the experience, outcomes, and impacts of the partnership; and assess the long-term outputs and impacts of CBL practices would be valuable for students, faculty, academic institutions, and community partners. As described above, these recommendations align with Saltmarsh et al.'s (2015) recommendations for deep, pervasive, and integrated CBL.

Participants also recommended that faculty should tailor the CBL course experience to student background and capacity. Some reported frustration that faculty provided too much or too little guidance in activities such as finding and working with community partners, developing projects viable in the time available, and moderating conflict with team members. Although contextually responsive, scaffolded engagement and targeted student support are important, our results demonstrate that student initiative and agency in overcoming these challenges are related to creating the long-term benefits. Overcoming challenges as a value in hindsight of CBL experiences was a theme that emerged first in the open-ended survey data and came to life through the interviews. The experience of navigating and overcoming challenges, particularly actively engaging with community members and organizations and navigating team dynamics, produced skills that respondents now utilize in their current lives. Reaching out to new people and communities as well as navigating conflict in working with others were often cited as skills that former students draw upon today. It is important to note that this learning was also cited in interviews as uniquely valuable when compared to their experiences in non-CBL courses. The interview data were critical in understanding how and why these challenges were perceived as valuable for former students. In part, this motivates our recommendation that faculty clearly articulate the expectations, goals, and learning opportunities for students.

Given the results of our research, we encourage faculty who are considering integrating a CBL project to seek guidance from experienced CBL students, faculty, and community members; review and integrate recommendations from critical service learning scholars and practitioners; implement longitudinal assessment measures; and communicate the learning curve to the administration and fellow faculty at their institutions. To support student learning, we also recommend faculty pursue opportunities for CBL experiences that span semesters or courses; provide support identifying and contextualizing problems historically and politically in the partner communities; guide students through managing interpersonal conflict; and explicitly identify and link the skills being developed by students to their future personal, professional, and civic endeavors.

Limitations and Opportunities for Future Research

This study examined the post-course impact of CBL by applying a mixed methods approach to generate more robust findings about the long-term impact of the experience on students. There were, however, a number of limitations that impact the external validity of this study. The data were collected from students from a purposeful sample of courses at one institution, without data from a control group. This study also focused on long-term outcomes from the student perspective and thus does not provide a complete picture of the value and limitations

of CBL projects from other critical perspectives, especially those of community members and partners (Kepkiewicz et al., 2018). Exploring how these results are affirmed or complicated from the faculty and community partner perspectives is a critical next step.¹¹ Comparing former students' perceptions of CBL course impact with those of the community and instructors would be a logical extension of this research. In general, more research studies designed to assess the long-term impact of this work from all stakeholders' perspectives would provide evidence for course and project designs that yield more educational, inclusive, and socially just impact.

In addition to exploring the emergence of recent tools designed to provide easy-to-use, quick, valid, and reliable feedback on CBL experiences (Miller et al., 2018), future research should continue to apply and refine the survey, interview, and methodological tools used here, to continually improve capturing and communicating the impact of CBL projects and courses.

Attempts to replicate findings across disciplines, faculty experience levels, institutions, and with different types of students would also be valuable for supporting longitudinal assessment that informs and reforms effective CBL curricular practices. For example, our data show significant differences in student outcomes based on how new faculty members were to implementing project-based CBL, and we compared those outcomes for that same faculty member after they had gained experience. These practices were not widespread at the institution, and our participants were drawn from the sections of these few faculty. With the passing of time, this study can be repeated to examine long-term impacts from more practices, disciplines, faculty, and faculty experience levels. The changing student outcomes based on faculty experience with CBL clarify the need for tracking and analysis of institutional changes around the personnel and curriculum policies that will either support or hinder the future of CBL in higher education.

Conclusion

This study contributes to the CBL literature by using a mixed methods approach to better understand the challenges and the value of CBL for personal, professional, and civic life post-graduation. Our findings both align with and further complicate prior research. Our data demonstrate that former students believed their CBL experiences improved their learning; cultivated a sense of social responsibility and civic-mindedness; and built skills needed for their post-course civic, professional, and personal lives that were sustained for years after the experience. Similar rates of agreement were found in respondents across courses, who said that CBL helped them see the world in new ways, understand how to affect their community, identify the source of a problem, and create a plan to address those problems and that they had made a contribution to their community through their CBL experience. The data also revealed a few significant differences in reported student outcomes across disciplines and projects. Respondents from interdisciplinary and leadership-focused fields felt more confident they could identify the sources of complex problems and analyze power dynamics than did students from other types of programs.

Particularly noteworthy, our study substantiates recent findings that long-term transformational growth

11. The authors thank an anonymous referee for this recommendation.

in CBL knowledge, values, and skills does not easily transfer into formal engagements within civic and social spheres. Respondents indicated that their desire to engage the civic sphere was hampered by the daily and weekly commitments of their professional and personal lives. These findings lead us to suggest CBL practitioners from all fields provide opportunities for students to examine the systemic and procedural challenges they are likely to confront post-graduation and explore an array of actionable strategies for engaging across social and civic spheres.

In contrast to earlier studies, our study more closely examined the long-term effects of the collaborative and project-based nature of CBL experiences. In particular, our research highlights a link between the real-world challenges of project-based CBL, the relational nature of the approach, and its long-term impact. Respondents emphasized that it was the challenge of navigating the uncertainties of collaborative, real-world projects that produced shifts in their mindsets and fostered skills valuable to them today.

Participants provided recommendations for improving CBL experiences, and we articulated several recommendations for educators and avenues for future research, such as the need for diverse development opportunities that include community, student, and interdisciplinary guidance and programmatic assessment efforts designed to capture the value and the limitations of CBL from student and community perspectives. Creating mutually beneficial CBL projects requires a nuanced understanding of a host of interconnecting social and institutional factors that exist far outside of disciplinary expertise.

This study corroborates and builds upon prior research by confirming the value, challenges, and potential limitations of CBL as a pedagogical practice that can foster the knowledge, skills, and dispositions needed to address pressing civic, professional, and personal challenges for communities in the 21st century. Leaders in the field believe the rationale for CBL lies not just in its potential to support deep learning and improve student engagement but in its ability to foster a sense of social responsibility and civic-mindedness (Battistoni et al., 2009; Hatcher et al., 2017). We see an opportunity for CBL to not only foster professional development and civic-mindedness but also more intentionally build the capacities and skill sets of graduates to *act* in ways that disrupt oppressive structures and create more inclusive and equitable civic processes.

References

- Alexander, E. S., Browne, F. R., Eberhart, A. E., Rhiney, S. L., Janzen, J., Dale, K., & Vazquez, P. (2020). Community service-learning improves learning outcomes, content knowledge, and perceived value of health services education: A multiyear comparison to lecture. *International Journal of Research on Service-Learning and Community Engagement*, 8(1), Article 5. <https://doi.org/10.37333/001c.18079>
- American Association of Colleges & Universities. (2019). *About AAC&U*. Retrieved from <https://www.aacu.org/about>
- Arantes do Amaral, J. A. (2019). Combining community-based learning and project-based learning: A qualitative systemic analysis of the experiences and perceptions of students and community partners. *Partnerships: A Journal of Service-Learning and Civic Engagement*, 10(1), 129–145.

- Astin, A. W., Sax, L. J., & Avalos, J. (1999). Long-term effects of volunteerism during the undergraduate years. *The Review of Higher Education*, 22(2), 187–202.
- Astin, A. W., Vogelgesang, L. J., Misa, K., Anderson, J., Denson, N., Jayakumar, U. M., Saenz, V., & Yamamura, E. (2006). Understanding the effects of service-learning: A study of students and faculty. *Report to the Atlantic Philanthropies*, 1155.
- Barbee, P. W., Scherer, D., & Combs, D. C. (2003). Prepracticum service-learning: Examining the relationship with counselor self-efficacy and anxiety. *Counselor Education and Supervision*, 43(2), 108–119.
- Battistoni, R. M. (1997). Service learning and democratic citizenship. *Theory Into Practice*, 36(3), 150–156.
- Battistoni, R. M. (2014). Beyond service and service-learning: Educating for democracy in college. In D. W. Brown & D. Witte (Eds.), *Higher Education Exchange* (pp. 53–64). Kettering Foundation.
- Battistoni, R. M., Longo, N. V., & Jayanandhan, S. R. (2009). Acting locally in a flat world: Global citizenship and the democratic practice of service-learning. *Journal of Higher Education Outreach and Engagement*, 13(2), 89–107.
- Battistoni, R. M., & Mitchell, T. D. (2018, Spring). Civic identity and agency after college: Alumni voices from three academic civic engagement programs. *AAC&U Newsletter*, 21(2). <https://www.aacu.org/diversitydemocracy/2018/spring/battistoni>
- Bennion, E. A. (2013). Moving assessment forward: Teaching civic engagement and beyond. In A. R. M. McCartney, E. A. Bennion, & D. Simpson (Eds.), *Teaching civic engagement: From student to active citizen* (pp. 437–445). American Political Science Association.
- Boyte, H. C. (2008). Against the current: Developing the civic agency of students. *Change: The Magazine of Higher Learning*, 40(3), 8–15.
- Campus Contact. (n.d.). *Toolkit: Interdependence*. <https://compact.org/global-sl/toolkit-interdependence/>
- Carlisle, S. K., Gourd, K., Rajkhan, S., & Nitta, K. (2017). Assessing the impact of community-based learning on students: The Community-Based Learning Impact Scale (CBLIS). *Journal of Service-Learning in Higher Education*, 6, Article 1. <https://eric.ed.gov/?id=EJ1186308>
- Celio, C. I., Durlak, J., & Dymnicki, A. (2011). A meta-analysis of the impact of service-learning on students. *Journal of Experiential Education*, 34(2), 164–181.
- Clayton, P. H., Bringle, R. G., & Hatcher, J. A. (Eds.). (2013). *Research on service learning: Conceptual frameworks and assessment*. Stylus Publishing.
- Colby, A., Beaumont, E., Ehrlich, T., & Corngold, J. (2007). *Educating for democracy: Preparing undergraduates for responsible political engagement*. Carnegie Foundation for the Advancement of Teaching.
- Deeley, S. J. (2010). Service-learning: Thinking outside the box. *Active Learning in Higher Education*, 11(43), 43–53.
- Divan, A., Ludwig, L. O., Matthews, K. E., Motley, P. M., & Tomljenovic-Berube, A. M. (2017). Survey of research approaches utilised in the scholarship of teaching and learning publications. *Teaching & Learning Inquiry*, 5(2), 16–29.
- Eyler, J., Giles, D. E., Jr., Stenson, C. M., & Gray, C. J. (2001). At a glance: What we know about the effects

- of service-learning on college students, faculty, institutions, and communities, 1993–2000: Third edition. *Higher Education*, Paper 139.
- Finley, A., & McNair, T. (2013). *Assessing underserved students' engagement in high-impact practices*. Association of American Colleges and Universities. https://www.aacu.org/sites/default/files/files/assessinghips/Assessing-HIPS_TGGrantReport.pdf
- Gillies, R. M., & Boyle, M. (2010). Teachers' reflections on cooperative learning: Issues of implementation. *Teaching and Teacher Education*, 26(4), 933–940. <https://doi.org/10.1016/j.tate.2009.10.034>
- Hatcher, J. A. (2008). *The public role of professionals: Developing and evaluating the Civic-Minded Professional Scale* [Unpublished doctoral dissertation]. Indiana University–Purdue University Indianapolis. <http://hdl.handle.net/1805/11951>
- Hatcher, J. A., Bringle, R. G., & Hahn, T. W. (Eds.). (2017). *Research on student civic outcomes in service learning: Conceptual frameworks and methods*. Stylus Publishing.
- Hernandez, C., Ravn, O., & Valero, P. (2015). The Aalborg University PO-PBL model from a socio-cultural learning perspective. *Journal of Problem Based Learning in Higher Education*, 3(2), 16–36.
- Hill, P. L., Pasquesi, K., Bowman, N. A., & Brandenberger, J. W. (2017). Longitudinal research and student civic outcomes. In J. A. Hatcher, R. G. Bringle, & T. W. Hann (Eds.), *Research on student civic outcomes in service learning: Conceptual frameworks and methods* (pp. 283–302). Stylus Publishing.
- Hill, T. L., Brandenberger, J. W., & Howard, G. S. (2005). *Lasting effects? A longitudinal study of the impact of service-learning*. Research Report 8. Center for Social Concerns, University of Notre Dame.
- Holland, B., & Robinson, G. (2008). Community based learning with adults: Bridging efforts in multiple sectors. *New Directions for Adult and Continuing Education*, 2008(118), 17–30. <https://doi.org/10.1002/ace.292>
- Hoover-Plonk, R. M. (2015). *The potential role of domestic co-curricular alternative spring break (ASB) experiences on participants' later civic behaviors and attitudes* [Unpublished doctoral dissertation]. East Carolina University. <https://thescholarship.ecu.edu/handle/10342/5120>
- Ibrahim, M. M., Rosenheim, M. R., Amer, M. M., & Larson, H. A. (2016). From Minnesota to Cairo: Student perceptions of community-based learning. *Education, Citizenship and Social Justice*, 11(3), 258–273.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1998). *Active learning: Cooperation in the college classroom*. Interaction Book.
- Kecskes, K. (2015). Collectivizing our impact: Engaging departments and academic change. *Partnerships: A Journal of Service-Learning and Civic Engagement*, 6(3), 54–72.
- Kepkiewicz, L., Levkoe, C. Z., & Brynne, A. (2018). “Community first” for whom? Reflections on the possibilities and challenges of community-campus engagement from the Community Food Sovereignty Hub. *Engaged Scholar Journal*, 4(2), 43–60.
- Kiely, R. (2004). A chameleon with a complex: Searching for transformation in international service-learning. *Michigan Journal of Community Service Learning*, 10(2), 5–20.
- Kiely, R. (2005). A transformative learning model for service-learning: A longitudinal case study. *Michigan Journal of Community Service Learning*, 12(1), 5–22.

- Kiely, R., & Sexsmith, K. (2018). Innovative considerations in faculty development and service-learning and community engagement: New perspectives for the future. In B. Berkey, C. Meixner, P. M. Green, & E. A. Eddins (Eds.), *Reconceptualizing faculty development in service-learning/community engagement: Exploring intersections, frameworks, and models of practice* (pp. 283–314). Stylus Publishing.
- Knefelkamp, L. L. (2008). Civic identity: Locating self in community. *Diversity and Democracy*, 11(2), 1–3.
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Association of American Colleges and Universities.
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Sage Publications.
- Lake, D., Lehman, M., & Chamberlain, L. (2019). Engaging through design thinking: Catalyzing integration, iteration, innovation, and implementation. *eJournal of Public Affairs*, 8(1).
- Lockeman, K. S., & Pelco, L. E. (2013). The relationship between service-learning and degree completion. *Michigan Journal of Community Service Learning*, 20(1), 18–30.
- Longo, N. V., & Gibson, C. M. (2011). Introduction: The new leadership. In N. V. Longo & C. M. Gibson (Eds.), *Command to community: A new approach to leadership education in colleges and universities* (pp. 3–23). University Press of New England.
- Mabry, J. B. (1998). Pedagogical variations in service-learning and student outcomes: How time, contact, and reflection matter. *Michigan Journal of Community Service Learning*, 5(1), 32–47.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Merrill, M., & Pusch, M. D. (2007). Apples, oranges, and kumys: Multiple methods, matrices, and models for research on students doing intercultural service-learning. In S. B. Gelmon & S. H. Billig (Eds.), *From passion to objectivity: International and cross-disciplinary perspectives on service-learning research* (pp. 21–40). Information Age.
- Miller, K. K., & Gonzalez, A. M. (2009). Service learning in domestic and international settings. *College Student Journal*, 43(2), 527–536.
- Miller, L., Mehta, S., & McCauley, D. (2018). The BACE scale: A new measure for assessing the benefits of community engagement. *International Journal of Research on Service-Learning and Community Engagement*, 6(1), Article 4.
- Mitchell, T. D., Battistoni, R. M., Keene, A. S., & Reiff, J. (2013). Programs that build civic identity: A study of alumni. *Diversity & Democracy*, 16(3), 22–23. <https://www.aacu.org/diversitydemocracy/2013/summer/mitchell-battistoni-keene-reiff>
- Mitchell, T. D., Richard, F. D., Battistoni, R. M., Rost-Banik, C., Netz, R., & Zakoske, C. (2015). Reflective practice that persists: Connections between reflection in service-learning programs and in current life. *Michigan Journal of Community Service Learning*, 21(2), 49–63.
- Mitchell, T. D., Rost-Banik, C., & Battistoni, R. M. (2019). Civic agency and political engagement: Community engagement's enduring influence. *Journal of Student Affairs Research and Practice*, 56(5), 582–594. <https://doi.org/10.1080/19496591.2019.1675678>
- Mitchell, T., Visconti, V., Keene, A., & Battistoni, R. (2011). Educating for democratic leadership at Stan-

- ford, UMass, and Providence College. In N. V. Longo & C. M. Gibson (Eds.), *From command to community: A new approach to leadership education in colleges and universities* (pp. 115–148). University Press of New England.
- Mueller, A. (2005). Antidote to learned helplessness: Empowering youth through service. *Reclaiming Children and Youth*, 14(1), 16–19.
- Nelson Laird, T. F., Shoup, R., Kuh, G. D., & Schwarz, M. J. (2008). The effects of discipline on deep approaches to student learning and college outcomes. *Research in Higher Education*, 49, 469–494.
- Novak, J., Markey, V., & Allen, M. (2007). Evaluating cognitive outcomes of service learning in higher education: A meta-analysis. *Communication Research Reports*, 24(2), 149–157. <https://doi.org/10.1080/08824090701304881>
- Nowrouzian, F. L., & Farewell, A. (2013). The potential improvement of team-working skills in biomedical and natural science students using a problem-based learning approach. *Journal of Problem Based Learning in Higher Education*, 1(1), 84–93.
- Raykov, M., & Taylor, A. (2018). *Beyond learning for earning: The long-term outcomes of course-based and immersion service learning*. University of British Columbia/St. Francis Xavier University.
- Reed, S. C., Rosenberg, H., Statham, A., & Rosing, H. (2015). The effect of community service learning on undergraduate persistence in three institutional contexts. *Michigan Journal of Community Service Learning*, 21(2), 22–36.
- Ruiz, A., & Warchal, J. (2013). Long-term impact of service-learning on alumni volunteer service activities. In P. L. Lin & M. R. Wiegand (Eds.), *Service-learning in higher education: Connecting the global to the local* (pp. 255–264). University of Indianapolis Press.
- Ryan, R. G. (2017). Social and cognitive outcomes of service-learning: Results from a pre-post and control group comparison. *Journal of Community Engagement and Higher Education*, 9(3), 19–34.
- Saltmarsh, J., Janke, E. M., & Clayton, P. H. (2015). Transforming higher education through and for democratic civic engagement: A model for change. *Michigan Journal of Community Service Learning*, 22(1), 122–127.
- Schnaubelt, T., & Coffey, C. S. (2016). Public service and civic engagement: Multiple pathways to social change. *Diversity & Democracy*, 19(3). <https://www.aacu.org/diversitydemocracy/2016/summer/schnaubelt>
- StataCorp. (2017). *Stata* (Release 15) [Statistical software]. <https://www.stata.com/>
- Wallace, J. (2000). The problem of time: Enabling students to make long-term commitments to community-based learning. *Michigan Journal of Community Service Learning*, 7, 133–142.

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Kristin Moretto has an extensive background in community engagement and over 15 years of experience in higher education and nonprofit leadership. She has led community-based and experiential learning programs and initiatives at Grand Valley State University, the University of South Florida, the University of North Carolina at Greensboro, and Michigan State University. Kristin earned a BA in Organizational Studies from the University of Michigan and an MA in Student Affairs Administration and a PhD in Higher, Adult, and Lifelong Education (HALE), both from Michigan State University.

Brandon W. Youker is an Associate Professor of Social Work at Grand Valley State University and an independent evaluation consultant. In addition to researching community-based learning, his work focuses on goal-free evaluation and its utility. Dr. Youker primarily teaches courses on social research methods and program evaluation.

APPENDIX A

Survey Questions Analyzed

Please indicate how much you agree or disagree with the following statements about the community-based learning (CBL) course:—The CBL course increased how frequently I listen to and discuss politics with people whose opinions may be different from my own.

Please indicate how much you agree or disagree with the following statements about the community-based learning (CBL) course:—The CBL course increased my confidence in my ability to make a difference in my community.

Please indicate how much you agree or disagree with the following statements about the community-based learning (CBL) course:—The CBL course increased my understanding of how to affect my community.

Please indicate how much you agree with the following statements. As a result of my participation in this course . . .—I felt that I made a contribution to the community beyond the campus.

Please indicate how much you agree with the following statements. As a result of my participation in this course . . .—I re-examined my beliefs and attitudes about myself.

Please indicate how much you agree with the following statements. As a result of my participation in this course . . .—I was exposed to new ideas and ways of seeing the world.

Looking back to what extent do you think this community-based learning (CBL) course helped you to do the following:—Understand your own social identities (such as race, gender, social class, etc.)?

Select the option that best describes how your experiences in the course influenced your career choices:
<options>

Rate how you feel your participation in the community-based learning (CBL) course has helped you to do any of the following when addressing a community challenge or social issue:—Identify the source/root of the problem.

Rate how you feel your participation in the community-based learning (CBL) course has helped you to do any of the following when addressing a community challenge or social issue:—Create a plan to address the problem.

Rate how you feel your participation in the community-based learning (CBL) course has helped you to do any of the following when addressing a community challenge or social issue:—Locate and analyze power around the issue.

In college, learning can occur in a variety of ways. When you think back upon your experiences in this community-based learning (CBL) course, to what extent were each of the following people or groups important to your learning?—Community members encountered during the course.

In college, learning can occur in a variety of ways. When you think back upon your experiences in this community-based learning (CBL) course, to what extent were each of the following people or groups important to your learning?—Site visits or other experiences outside the classroom.

In college, learning can occur in a variety of ways. When you think back upon your experiences in this

community-based learning (CBL) course, to what extent were each of the following people or groups important to your learning?—Other students in the course.

In college, learning can occur in a variety of ways. When you think back upon your experiences in this community-based learning (CBL) course, to what extent were each of the following people or groups important to your learning?—Instructor (in the class setting).

Looking back to what extent do you think this community-based learning (CBL) course helped you to do the following:—Understand course content.

Looking back to what extent do you think this community-based learning (CBL) course helped you to do the following:—Improve your skills and/or competencies.

APPENDIX B

Interview Questions

1. **Recall of CBL in Course:** I'd like you to think back to your time in [course name], tell me what you remember about the community-based aspects of the course. What did you do?
2. **Benefits of Course:** What turned out to be the most beneficial or valuable aspects of the course? Can you explain why or how you found this valuable? What assignment or projects were most helpful to you personally? How so?
3. **Course CBL Project & Personal Values:** To what extent did the CBL project/experience align with your own goals and values? How do you see the course projects aligning with your goals and values now? Did the CBL course help to shape or make you more aware of your values in any way? If so, How?
4. **Challenges of Course:** No course ever goes perfectly smoothly. What sort of problems or barriers did you confront? What happened? What was the result? What did you learn?
5. **Classroom Community:** Reflecting back, how do you compare being a member of this class in comparison to your other courses? Did or do you maintain relationships with any of the people from the course?
6. **Post-Course "Life" Experience:** Tell me about your life right now. I'd like to ask you how you got into the work that you now do. In what ways do you see it as similar or different from the work you were doing as a part of [insert course name]?
7. **Social Change/Social Justice:** What are the issues that you care about most (issues that are on your mind on a weekly if not a daily basis)? Are you currently taking some action to address the issues that are of greatest concern to you?
8. Finally, is there something I have not asked you that you would like to say or share?

Possible follow-up prompts for all categories:

- Tell me, what is that like for you?
- Do you have a story that illustrates that point?
- Tell me, what does that mean to you?

APPENDIX C

Accelerated Leadership

In the accelerated leadership program, students employ the design thinking method to support the local public school system. Students collect secondary data on the school system and its initiatives, conduct a site visit, hold a dialogue with local stakeholders, and design and prototype community projects. These course sections are distinct from the other courses in the study in that they are structured in an accelerated, cohort format that opens opportunities for students to continue their CBL projects across their degree program, rather than in one isolated course, through future course work, internships, and capstone projects.

Interdisciplinary General Education

In the interdisciplinary general education courses, students conduct secondary research and talk with local stakeholders to define a “wicked problem” and devise an action plan. In collaboration with the community partner, students prototype and test their plan, create a report, and present their findings to the community. These interdisciplinary courses also utilize design thinking practices requiring students to collaboratively ideate around local issues ranging from homelessness to food access to community policing. For further information about design thinking pedagogies, see Lake et al. (2019).

Social Work

The social work practice course under investigation fosters macro-level social work skills through a collaborative community intervention project that allows students to engage with a predetermined urban neighborhood. Students gather primary and secondary data to learn about their neighborhood and to assess the community’s needs. Students then develop, propose, and carry out an intervention project followed by evaluating the project outcomes.

Economics

In the economics course, students apply economic theory and empirical methods to analyze data from local nonprofit organizations, analyzing organizational operations and programs. The students develop and offer recommendations to organizational and community social problems based on the results of their analyses.