© Journal of Higher Education Outreach and Engagement, Volume 28, Number 2, p. 41, (2024)
 eISSN 2164-8212

# Civic Engagement as a Course-Level Strategy for Integrative Learning

*Maia F. Bailey and Julia M. Camp*

**Abstract**

Engaged learning seeks to cultivate integrative approaches that require students to use multiple points of view or approaches in their coursework. Similarly, civically engaged courses ask students to consider public problems that involve multiple stakeholders, institutions, and policies. We are interested in whether courses designed to meet civic engagement goals might also improve student self-assessment of integrative learning at our institution and could serve as a developmental step toward more holistic strategies. To test our hypothesis that student participation in civic engagement would improve student self-assessment of integrative learning, we compared summative student survey scores from students enrolled in similar courses with and without a civic engagement component ($n$ = 275). Boxplot and statistical analysis (unpaired two-sample Wilcoxon test) were used to determine if civic engagement pedagogy made any meaningful impact on integrative learning. Our results show strong overall improvement in survey scores after civic engagement courses.

*Keywords: curricular assessment, curricular change, interdisciplinary learning, integrative learning, civic engagement, community-engaged learning*

In the book *Branches From the Same Tree*, the authors quote Albert Einstein: "All religions, arts, and sciences are branches from the same tree" (National Academies of Sciences, Engineering, and Medicine, 2018, p. 1), asserting that multiple bodies of knowledge are connected and should be integrated. Their study examines efforts to provide an integrated model of learning "that proponents argue will better prepare students for work, life, and citizenship" (p. 1). The Association of American Colleges and Universities (AAC&U) has identified integrative and applied learning as an essential learning outcome, defining integrative learning as "an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus" (AAC&U, 2009). Many schools are interested in improving integrative learning but lack a good road map to achieve these goals (DeZure et al., 2005). Model programs for integrative learning employ holistic strategies that help students incorporate their experiences across their education: cocurricular and curricular, general education and their major, entry-level courses and capstones (e.g., Richards-Schuster et al., 2014). The reality of institutional change is that most schools will not be able to implement complex new programs from scratch, but will need smaller, simpler stages to bridge their development (Lake et al., 2019). We are proposing civic engagement courses as one such bridge.

Civic engagement in higher education has increased in visibility and importance, reflecting recent civil rights movements and the effects of changes in civics education in K-12. As schools have moved to incorporate civic engagement, many have articulated civic learning objectives that can be integrated into coursework across disciplines

(Matto et al., 2017). When students struggle with public issues from lenses of citizenship and disciplinary expertise, civic engagement may also exemplify integrative learning by asking students to synthesize their roles, skills, and experiences from all parts of their lives; however, this possible effect of civic engagement on integrative learning, even when integrative learning is not an explicit goal of the course, has not been demonstrated.

At our home institution, all students are required to take a course that fulfills civic engagement learning objectives. Here, we define civic engagement to encompass learning that promotes the common good through course knowledge content on public issues and their stakeholders, student reflection on their various civic roles, and analytical skills development to tackle such complex, ill-structured problems. In response to this requirement, many different departments have developed courses that meet these goals, including Accountancy, Biology, Finance, and Political Science. In each of these courses, students must engage with a public problem, explore the forces that act on this issue, articulate their own roles and responsibilities, and analyze the challenges to solving the problem. Beyond those requirements, courses may also include disciplinary content or goals and may use different methods to achieve their learning goals, such as service-learning, problem-based learning, reflection, and so on.

As instructors for civic engagement courses, we felt that there was considerable overlap between the learning outcomes for civic engagement and integrative learning. Certainly, it is possible for courses to address questions integrating views of multiple disciplinary lenses without being civic engagement courses. For example, a course on how nature has been defined over time by philosophers and biologists is interdisciplinary, but if these insights are not applied to how they affect conservation attitudes and policies, it is not a civically engaged course. Similarly, a purely civic course that focuses on the facts and history of government is unlikely to be integrative. However, due to the emphasis on personal agency and the complex nature of public problems and actors, civic engagement courses require students to incorporate reflection and multiple viewpoints, making them necessarily integrative.

To test this intuition, we devised an integrative learning survey tool to administer to students in civic engagement courses. The survey combined seven questions developed from the reflective and integrative learning engagement indicators of the National Survey of Student Engagement (NSSE, 2013) and a published survey with 31 questions used to evaluate ePortfolios as an integrative learning approach (McGuinness, 2015). Each survey question asks the students to self-assess their attainment of specific components of integrative learning. Surveys were administered within the first 2 weeks of 16-week semester courses and again in the last 2 weeks of the same courses. Both civic engagement and non-civic engagement courses were surveyed.

Overall, we have found that courses designed to meet civic engagement goals may also help develop and improve students' integrative learning, even when integrative learning goals are not an explicit part of course design. Although single courses do not meet all the goals of integrative learning or provide the same outcomes as other methods, such as ePortfolios, civic engagement courses are one tool among many for helping students feel more engaged and apply their learning across disciplinary boundaries.

## Literature Review and Research Questions

Integrative learning involves both making connections and using knowledge from across the curriculum to solve problems both in other courses and outside the learning experience (AAC&U, 2009). Students learn how to apply learning from a classroom setting to different domains such as community service by using skills involving beliefs, learning experiences, and both academic- and self-interests (Richards-Schuster et al., 2014). Integrative learning is using different strategies to "pursue learning in intentionally connected ways" (Galvin, 2006).

> One of the key goals of integrative learning activities is to assist students in bringing to the forefront what they have learned and the impact of that learning on their day-to-day interactions and future goals. (Richards-Schuster et al., 2014, p. 133)

The AAC&U sees integrative learning as one

of the most important aspects of higher education and has worked to encourage it across campuses in the United States. Integrative learning fosters the skills needed to tackle real-world experiences and problems. In general, situations encountered outside the academic setting involve a variety of disciplines and often need varied approaches to solve (e.g., wicked problems; McCune et al., 2021). For example, if one examines the COVID-19 pandemic, the problem involves not only science, but also disciplines involving philosophy, politics, communication, economics, and sociology. Policymakers must consider not just epidemiological factors but also ethics, effective communication, and other social factors in order to craft effective policies.

Integrative learning can be considered an "umbrella term" (Klein, 2005) covering different strategies and activities that work to connect knowledge and the application of knowledge to problems. Students develop insights into different perspectives to help put together pieces of a larger puzzle (Newell, 1999). "Interdisciplinary studies" is often included as a subset of integrative learning (Klein, 2005) and involves using multiple disciplines to study a topic for a wider breadth of knowledge. Within interdisciplinary knowledge other disciplines help support and connect the main idea, but their status and importance are not equal (Kratochvil, 2013). The main difference between integrative and interdisciplinary is that integrative approaches involve making connections to analyze and synthesize problems outside the academic setting (Huber et al., 2005), whereas interdisciplinary learning tends to be limited to a purely academic setting (Newell, 1999).

Although integrative learning is noted as being important to education and has been discussed since the 1850s (Klein, 2005), definitions and assessment remain problematic. DeZure et al. (2005) noted that many schools still struggle to practice integrative learning across their curriculum in more than a basic way and do so inconsistently. These researchers also identified the lack of accepted metrics for measuring integrated learning as a barrier to improvement. More recently, Luo (2021) expanded the intended outcomes of integrative learning to include cultural competencies such as diverse interaction across college campuses and exposing students to differing points of view. Conversely, most of these studies agree on the impact integrated learning provides for improvement in skills and career success.

Other research has assessed strategies of incorporating integrative learning within curriculum and campus communities. For example, Galvin (2006) and Newell (1999) emphasized experiences outside typical classroom courses as important pieces of integrative learning. These studies identified information literacy as a portable skill that students can learn and apply through experiences such as writing across the curriculum, first-year experience programs, service-learning, study abroad, and learning communities. Lake et al. (2019) argued that engaged learning across different departments across years is effective for integrative learning but acknowledged the many challenges regarding workload and institutional support. Other research has focused on the idea of capstone courses and using projects such as ePortfolios to help connect concepts learned across the curriculum (Kinzie, 2013; Richards-Schuster et al., 2014; Stubbs et al., 2013). Carpenter (2015) discussed how outreach programs helped improve integrated learning among graduate education students and improved interest in civic engagement. These studies agree that integrative learning helps students apply concepts to experiences they will encounter in work and life outside college. Going one step further, Hancock et al. (2010) provided a case study in how to encourage student engagement by building community partnerships to address real-life applications and problems.

Similar to research emphasizing the importance of integrative learning, research on civic engagement also draws attention to the centrality of civic engagement as a higher education outcome. The report *A Crucible Moment: College Learning and Democracy's Future* (National Task Force on Civic Learning and Democratic Engagement, 2012) called for colleges and universities to educate students on engaged citizenship. The report found that civically engaged students are better students, have skills that are employable, and are more socially responsible. Similarly, Halonen and Dunn (2018) argued that incorporating service-learning, among other strategies, can help students and their parents understand the application and value of their degrees.

Compared to the literature on integrative learning, studies of civic engagement in higher education seem to have broader

agreement on the goals and outcomes but focus more on modalities (e.g., project-based, service-learning, community-based) of learning and measuring life-long impact. Holland (2001) discussed the movement of bringing civic engagement into the world of higher education. Overall, she pointed out how engagement can improve student learning and also involve academic institutions within their communities. In addition to Holland's report, other studies also have discussed the importance of measuring the impact of civic engagement and have provided examples of projects from a number of institutions (Campbell, 2009; Egerton, 2002; Liszka et al., 2022; Mehta et al., 2015; Orphan & Hartley, 2021; Westheimer & Kahne, 2004).

However, some research has cast doubt on the effectiveness of civic engagement. Egerton (2002) went so far as to conclude that higher education did little to change the civic engagement of students and that the relationship of their families and professional occupations had more important connections. Barnett (2020) carefully reviewed work on the impacts of various civic engagement pedagogies (social justice content, service-learning, intergroup dialogue, etc.) to show that they may be less effective in improving learning outcomes for students of color. In particular, she identified how instructors design and deliver their courses, including whether they integrate learning and handle conflict and negative interactions between students, as key in ensuring these courses benefit students of color (Barnett, 2020).

Service-learning is often used in colleges to promote civic engagement and student learning. Celio et al. (2011) presented a meta-analysis of how service-learning impacts student learning and found that service-learning does have a positive effect on civic engagement. Other specific studies reflect similar findings confirming an improvement in civic engagement from service-learning (Conner & Erickson, 2017; Lichtenstein et al., 2011; Rochford & Hock, 2010; Rockenbach et al., 2014). In a longitudinal study, Keen and Hall (2009) found that students involved in civic engagement and service-learning over 4-year programs continued to be involved after graduation. Ngai et al. (2019) presented an empirical study to discuss success elements of service-learning and discussed civic learning outcomes associated with service-learning. However, the study did not discuss integrated learning as a benefit and left a gap in the literature regarding the connection.

Community-based learning is a category that includes service-learning but may also include courses where students do not perform service directly but work on projects that indirectly serve the community (Kuh, 2008). McClellan et al. (2021) assessed the impact of community-based learning on NSSE indicators, including reflective and integrative learning. Like Barnett (2020), they found that the impact of these civic engagement pedagogies depends on other factors. In their study, arts and science majors were more likely to benefit from community-based learning than professional studies majors (McClellan et al., 2021).

Other studies on civic engagement discuss how service-learning alone cannot address issues of civic engagement (Bringle, 2017; Morton & Bergbauer, 2015). Bringle (2017) discussed how integrating service-learning with other pedagogies can enhance the overall learning experience. Without specifically mentioning the term "integrative learning," the study discussed how the use of multiple strategies gives students a deeper experience. Our study adds to this previous research by explicitly testing effects of service-learning and non-service-learning civic engagement on integrative learning.

Literature discussing the overlap of civic engagement and integrative learning is minimal and focuses on the effects of integrative learning on citizenship as an outcome. *Branches From the Same Tree* (National Academies of Sciences, Engineering, and Medicine, 2018) discussed how integrated learning improves skills such as communication, critical thinking, and teamwork and can lead to "productive citizenship." Other research (Kahu, 2013) has presented a framework for student engagement in higher education, suggesting that a consequence of student engagement is citizenship. New assessment instruments include both civic engagement and integrative learning domains as separate entities. For example, Richards-Schuster et al. (2014) discussed using ePortfolios to assess integrative learning and civic engagement. Their study uses items from the National Survey of Student Engagement (NSSE, 2013) and the VALUE rubric from AAC&U (2009) to measure civic engagement and integrative

learning, among other skills. The study presented ePortfolios merely as a way to assess civic engagement and integrative learning but did not draw any conclusions on any impact of civic engagement on the integrative learning experience. Our study shows how civic engagement across the curriculum shares cognitive skills with integrative learning such that civic engagement instruction improves integrative learning self-assessment.

Given the minimal prior literature regarding civic engagement and integrative learning together, we have developed the following research question:

> RQ1: Do courses designed to meet civic engagement goals improve integrative learning survey responses?

Williams Howe et al. (2014) articulated the range of pedagogical tools that can be used in civic engagement courses and how these tools can be developmentally ordered to enable scaffolding skills over time. Our sample included diverse courses each with their own activities, assessments, and time spent on civic engagement. This variety of courses allows us to see if integrative learning happens only as a by-product of particularly high-impact courses that incorporate service-learning or community engagement throughout the course or if courses with much more limited civic engagement content are adequate to improve student self-assessment of integrative learning.

> RQ2: Are more active civic engagement courses, i.e., those that incorporate interaction with community members or service-learning, better at improving integrative learning survey responses?

## Methods

Our experimental design is a case-study approach utilizing existing student enrollments at our primarily undergraduate, liberal arts college in the northeast United States. Our independent variable is the type of civic engagement pedagogy used in the course, and changes in self-assessed survey responses by students in those courses are the dependent variable.

Our institution has substantial general education requirements for graduation, including proficiency in civic engagement. Courses that may be taken to fulfill this proficiency can be from any discipline but must include the learning goals specific to civic engagement and provide evidence in the syllabus that appropriate texts, activities, and assessments are in place to support these learning goals. According to the legislation that created this curriculum requirement (Providence College Faculty Senate, 2010), the civic engagement proficiency courses must include the following learning goals:

- Offer students the opportunity to examine, in depth, a public problem or civic issue that concerns them.
- Explore the nature of social, cultural, political, and/or environmental forces, institutions, and ideas that influence public problems and their resolution in public life.
- Encourage students to consider their own role in the larger community and their responsibilities within that community. This consideration would include an analysis of citizen obligations to promote key elements of the common good, such as social justice, solidarity, human rights and dignity, participation, peace, subsidiarity, cultural and economic justice, and environmental sustainability.
- Analyze the challenges associated with seeking the common good (e.g., collective decision making, public program implementation, community service provision).

Civic engagement courses have often included service-learning at our institution; however, the current legislation does not require service-learning to fulfill the proficiency.

For our study, course instructors were recruited from traditional (political science) and nontraditional disciplines (accountancy, biology, economics, and finance) for civic engagement, using databases of approved civic engagement courses and current course offerings (Table 1). We also recruited two additional finance course instructors to administer the survey as controls. These two finance course sections did not include any civic engagement learning goals but were similar to the civic engagement finance course in level of content knowledge and discipline and could be considered broadly representative of upper level courses in

our institution. Among the civic engagement courses, there was some variation in the modality of engagement. The biology course we evaluated included significant hours of service and weekly reflection. Two of the four sections of the political science course included community-based learning in which the students spent time with community organizations. None of the surveyed courses included explicit integrative learning goals. Surveys were administered starting with the authors' own courses (accountancy and biology) in Fall 2016 and grew to include six additional instructors in three other disciplines in Fall 2018.

Our survey tool (see Table 2) was developed by combining survey questions from two sources: the National Survey of Student Engagement questions on reflective and integrative learning (NSSE, 2013) and an instrument for evaluating the integrative learning outcomes of ePortfolios (McGuinness, 2015). These sources were chosen as validated instruments for assessing integrative learning outcomes that will allow us to assess our results relative to other schools and to a particular pedagogical methodology for fostering integrative learning. This instrument and our administration of it to students were approved by our Institutional Review Board as exempt.

**Table 1. Surveyed Courses and Their Civic Engagement Content**

| Discipline | Title | Primary civic engagement assignment | Survey responses (*n*) | Civic engagement type* |
|---|---|---|---|---|
| Accountancy | Taxes and Business Decisions | Tax policy paper: "Research and describe the law, identify the stakeholders, make your opinion on the law, write a communication to a Legislator, and reflect upon your research." | 25 | CE |
| Biology | Service Learning in Biology | Service requirement: "Perform 100+ hours of service with a local community non-profit working in a biology-related field." | 15 | SL |
| Economics | Environmental & Natural Resource Economics | Term paper: "Examine in depth an important challenge facing the sustainable use of our environmental and natural resources and . . . write a policy position paper explaining their position." | 20 | CE |
| Finance | Financial Institutions and Markets | Civic engagement project uses a finance lens "to explore . . . institutions and ideas that influence public problems and their resolution in public life," "to consider your [the student's] role in the larger community and your responsibilities within that community," and "to analyze the challenges associated with seeking the common good." | 55 | CE |
| Finance | Managerial Finance | None | 99 | No CE |
| Political Science | Politics | Political issue group project: "Class presentation covering research issue in depth including areas of debate, source of disagreement, possible resolutions." | 30 | CE |
| Political Science | Politics | Community-based experiences: "You will get an opportunity to learn from these organizations from a variety of different perspectives, including staff, youth, board members and allies. You will also get to see these organizations in action, whether it's visiting program, participating in a workshop, attending a fundraiser, observing a meeting and more!" | 31 | COM |

*Note.* *Course civic engagement types are abbreviated as follows: CE = includes civic engagement components; SL = includes service-learning civic engagement; COM = includes community-based civic engagement; No CE = did not include civic engagement as a planned course component.

## Table 2. Survey Instrument and Responses

| NSSE Reflective & Integrative Learning (2013) | | | Civic engagement courses | | | Non-CE courses | | | 2017 NSSE Carnegie peers | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Question text | Response scale | *N* | Pre-course mean | Post-course mean | *N* | Pre-course mean | Post-course mean | 1st years' mean | seniors' mean |
| 1 | During the current school year, how often have you combined ideas from different courses when completing assignments? | 1–4 (never, sometimes, often, very often) | 176 | 2.45 | 2.93 | 99 | 2.35 | 2.59 | 2.6 | 2.9 |
| 2 | During the current school year, how often have you connected your learning to societal problems or issues? | 1–4 (never, sometimes, often, very often) | 176 | 2.52 | 3.15 | 99 | 2.46 | 2.50 | 2.6 | 2.8 |
| 3 | During the current school year, how often have you included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments? | 1–4 (never, sometimes, often, very often) | 176 | 2.44 | 2.92 | 99 | 2.43 | 2.54 | 2.6 | 2.7 |
| 4 | During the current school year, how often have you examined the strengths and weaknesses of your own views on a topic or issue? | 1–4 (never, sometimes, often, very often) | 175 | 2.45 | 2.96 | 98 | 2.56 | 2.53 | 2.8 | 2.9 |
| 5 | During the current school year, how often have you tried to better understand someone else's views by imagining how an issue looks from his or her perspective? | 1–4 (never, sometimes, often, very often) | 176 | 2.71 | 3.09 | 99 | 2.73 | 2.77 | 2.9 | 3.0 |
| 6 | During the current school year, how often have you learned something that changed the way you understand an issue or concept? | 1–4 (never, sometimes, often, very often) | 176 | 2.49 | 2.99 | 97 | 2.70 | 2.69 | 2.8 | 3.0 |
| 7 | During the current school year, how often have you connected ideas from your courses to your prior experiences and knowledge? | 1–4 (never, sometimes, often, very often) | 175 | 2.91 | 3.14 | 99 | 2.91 | 2.96 | 3.0 | 3.2 |

*Table continued on next page*

## Table 2. Continued

| McGuinness (2015) | | | Civic engagement courses | | | Non-CE courses | | |
|---|---|---|---|---|---|---|---|---|
| | Question text | Response scale | *N* | Pre-course mean | Post-course mean | *N* | Pre-course mean | Post-course mean |
| 8 | I can identify my strengths and the challenges (e.g., gaps in my knowledge) I encounter in specific learning or work situations (e.g., in writing a paper or doing research). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.90 | 4.01 | 99 | 3.95 | 4.09 |
| 9 | I make choices to enhance my strengths and address my gaps/challenges in specific work or learning situations (e.g., going to office hours when I am struggling to understand something). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.92 | 3.96 | 99 | 3.77 | 3.87 |
| 10 | I can provide evidence (i.e., in an essay, story, or other course assignment) of how I have expressed my strengths and/or taken action to address my challenges in specific situations. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.75 | 4.05 | 99 | 3.70 | 3.77 |
| 11 | I can articulate specific examples of my personal values and beliefs (e.g., believing in values such as “self-motivation” or “contributing to the well-being of others”). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.19 | 4.34 | 99 | 4.03 | 4.08 |
| 12 | I can identify examples of how my personal values and beliefs influence my learning, decisions, and actions (e.g., in the subjects I have chosen to study, or the groups I have chosen to join). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.03 | 4.26 | 99 | 4.02 | 4.01 |
| 13 | I can provide evidence (i.e., in a reflective essay, video, or other course assignment) of how my personal values and beliefs have informed my decisions and actions. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.89 | 4.16 | 99 | 3.73 | 3.84 |
| 14 | I am aware that my background and social identities (e.g., my race, gender, nationality, social class, religion, sexual orientation) influence my perspective—how I see the world and make sense of things. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.33 | 4.49 | 99 | 4.20 | 4.14 |

*Table continued on next page*

## Table 2. Continued

| McGuinness (2015) | | | Civic engagement courses | | | Non-CE courses | | |
|---|---|---|---|---|---|---|---|---|
| | Question text | Response scale | *N* | Pre-course mean | Post-course mean | *N* | Pre-course mean | Post-course mean |
| 15 | I can identify specific experiences (e.g., moments in my classes or in social situations) where I have learned about the strengths, limitations, and/or biases inherent in my own perspective. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.87 | 4.16 | 99 | 3.75 | 3.80 |
| 16 | I can provide evidence (i.e., a reflection essay, presentation, or other course assignment) of the knowledge and insights I have gained regarding the strengths, limitations, and biases within my own perspective. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.67 | 3.95 | 99 | 3.57 | 3.72 |
| 17 | I recognize how interacting with people from backgrounds and cultures different from my own enhances my work and learning. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.35 | 4.44 | 99 | 4.27 | 4.23 |
| 18 | I actively seek to understand the views of people with backgrounds and perspectives different from my own. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.89 | 4.11 | 99 | 3.97 | 3.87 |
| 19 | I can demonstrate (i.e., through stories, reflection essays, or other course assignment) the specific ways in which I have learned from people with backgrounds, cultures, and perspectives different from my own. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.81 | 4.06 | 99 | 3.71 | 3.60 |
| 20 | I understand that different types of knowledge/skills are gained from different kinds of experiences (e.g., in general, the knowledge/skills gained from taking an English class are different from the knowledge/skills gained from participating on a sports team). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.36 | 4.39 | 99 | 4.25 | 4.08 |
| 21 | I can clearly identify the specific types of knowledge and skills I have gained from different learning and life experiences (e.g., from academic classes, paid work, personal challenges, or leadership opportunities). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.19 | 4.31 | 99 | 4.20 | 4.04 |

*Table continued on next page*

## Table 2. Continued

| McGuinness (2015) | | | Civic engagement courses | | | Non-CE courses | | |
|---|---|---|---|---|---|---|---|---|
| | Question text | Response scale | *N* | Pre-course mean | Post-course mean | *N* | Pre-course mean | Post-course mean |
| 22 | I can clearly demonstrate (i.e., through a reflective essay, video, PowerPoint, or other course assignment) the specific types of knowledge and skills I have gained from a wide range of learning and life experiences. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.98 | 4.17 | 99 | 4.00 | 3.94 |
| 23 | I understand the need to connect knowledge I have gained from one place (e.g., the skills gained from participating on a sports team) to other situations (e.g., working with a group to solve a math or chemistry problem). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.29 | 4.36 | 99 | 4.10 | 4.08 |
| 24 | I can identify several different examples of how I have applied the knowledge or skills I have gained from one experience (e.g., learning to convey the essence of complex information for a science presentation to other situations (e.g., creating an interesting website for a student organization). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.93 | 4.09 | 99 | 3.85 | 3.90 |
| 25 | I can provide evidence (i.e., though an essay, video, presentation, or other course assignment) of the specific ways in which I have applied the knowledge/skills I have gained in one experience to other situations or contexts. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.89 | 4.06 | 99 | 3.80 | 3.80 |
| 26 | I can clearly identify the passions, interests, and sources of curiosity that influence my learning, work, and social life. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.11 | 4.26 | 99 | 4.23 | 4.08 |
| 27 | I have the habit of creating learning and/or professional goals that are informed by my passions, interests, sense of purpose, or sources of curiosity. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.01 | 4.14 | 99 | 4.10 | 4.14 |

*Table continued on next page*

## Table 2. Continued

| McGuinness (2015) | | | Civic engagement courses | | | Non-CE courses | | |
|---|---|---|---|---|---|---|---|---|
| | Question text | Response scale | *N* | Pre-course mean | Post-course mean | *N* | Pre-course mean | Post-course mean |
| 28 | I can demonstrate to others (i.e., through a PowerPoint presentation, paper, video, or other course assignment) the knowledge/skills I have gained from pursuing an area of study, or engaging in a series of actions, that reflect my passions, interests, and sources of curiosity. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.89 | 4.17 | 99 | 4.04 | 3.96 |
| 29 | I can identify the standards that both myself and others will use to evaluate my learning and/or work (e.g., the criteria a professor or supervisor will use to assess my work as “excellent,” “good,” or “needs improvement”). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.90 | 4.14 | 99 | 3.87 | 3.86 |
| 30 | I often reflect on if and how my work (academic and otherwise) is meeting my own standards and expectations. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.13 | 4.26 | 99 | 4.03 | 4.04 |
| 31 | I seek feedback on a regular basis in order to understand if and how my work (academic and otherwise) meets the needs, standards, and/or expectations of others. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.82 | 3.97 | 99 | 3.61 | 3.67 |
| 32 | I can demonstrate (i.e., through a reflective essay, feedback from supervisors, or other course assignment) how I have changed my perspective, decisions, or actions as a result of my own reflections or feedback from others. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.73 | 4.00 | 99 | 3.61 | 3.78 |
| 33 | I can work with others to identify a problem or need within a specific field, group, organization, or community (e.g., a school or non-profit organizations needing additional funds or resources in order to fulfill their mission). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.07 | 4.33 | 99 | 4.00 | 4.03 |

*Table continued on next page*

## Table 2. Continued

| McGuinness (2015) | | | Civic engagement courses | | | Non-CE courses | | |
|---|---|---|---|---|---|---|---|---|
| | Question text | Response scale | *N* | Pre-course mean | Post-course mean | *N* | Pre-course mean | Post-course mean |
| 34 | I can work with others to develop a plan and take action in order to address the needs of a group, organization, or community (e.g., creating a stable funding stream to support a non-profit organization in an ongoing basis). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.06 | 4.27 | 99 | 4.12 | 4.04 |
| 35 | I can provide evidence (through a presentation, video, letters from others, or other course assignment) of how I have worked with others to identify and address a problem, need, or challenge within a group, organization, or community. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 3.85 | 4.16 | 99 | 3.88 | 3.76 |
| 36 | I recognize the need to reflect on how my decisions and actions affect others (i.e., asking myself, "Do my decisions contribute to the overall care, well-being, or positive functioning of individuals, groups, organizations, and communities that are a part of my life?"). | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.15 | 4.33 | 99 | 4.09 | 3.99 |
| 37 | I can identify specific moments or experiences where I have developed or practiced ethical principles (e.g., the principles of equity, justice, fairness, compassion, care) in my decision making and actions. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.20 | 4.27 | 99 | 4.03 | 3.98 |
| 38 | I can provide evidence of decisions and actions where I have either developed, or expressed, one or more ethical principles (e.g., equity, justice, fairness, compassion, care) in the context of working with individuals, groups, organizations, or communities that are a part of my life. | 1–5 (strongly disagree, disagree, neutral, agree, strongly agree) | 176 | 4.08 | 4.21 | 99 | 3.88 | 3.94 |

*Note.* Questions 1–7 are from the National Survey of Student Engagement (NSSE, 2013) and have a scale of 1–4 (*never*, *sometimes*, *often*, *very often*); Questions 8–38 are from McGuinness (2015) and have a scale of 1–5 (*strongly disagree*, *disagree*, *neutral*, *agree*, *strongly agree*). NSSE comparison data are from all peer Carnegie schools administered in 2017 (NSSE, 2017). Similar comparative data is not available for the McGuinness (2015) survey questions; therefore, we removed this final column from the table for questions 8-38.

For each course, the survey was administered within the first 2 weeks of class and readministered in the last 2 weeks of class. Ideally, surveys would be administered before any significant learning has occurred in the course; however, due to constraints on class time to devote to the survey and the uncertainty of course enrollments during the first weeks of instruction, we were unable to administer surveys any earlier.

Pre- and postcourse survey questions were matched using a nontraceable identifier made of letters from a parent's name and digits from the student's phone number. In some cases, near matches were included, though we tried to be conservative in allowing nonexact matches. Unmatched surveys were excluded from analysis.

The response scale varied between the portions of the survey derived from the NSSE (Kuh et al., 2001) and McGuinness (2015). The NSSE questions had possible responses of *never* (1), *sometimes* (2), *often* (3), or *very often* (4); the questions derived from McGuinness had a Likert response scale of *strongly disagree* (1), *disagree* (2), *neutral* (3), *agree* (4), and *strongly agree* (5). For each administration (pre- and postcourse), we report the mean responses for each question (Table 2).

The two portions of the survey, the NSSE-derived portion and the portion from McGuinness, were considered proxies for assessing integrative learning as a whole for each student. Therefore, rather than focus on individual questions in our analysis, we calculated differences between a student's precourse and postcourse surveys for each question, then summed across survey questions for each portion of the survey for each student. We then averaged among students within civic engagement course types for these summative measures. The resulting two scores (labeled "NSSE" and "McGuinness") preserve the variation due to differences between students while producing a more continuous metric that gives a conservative holistic assessment of impact.

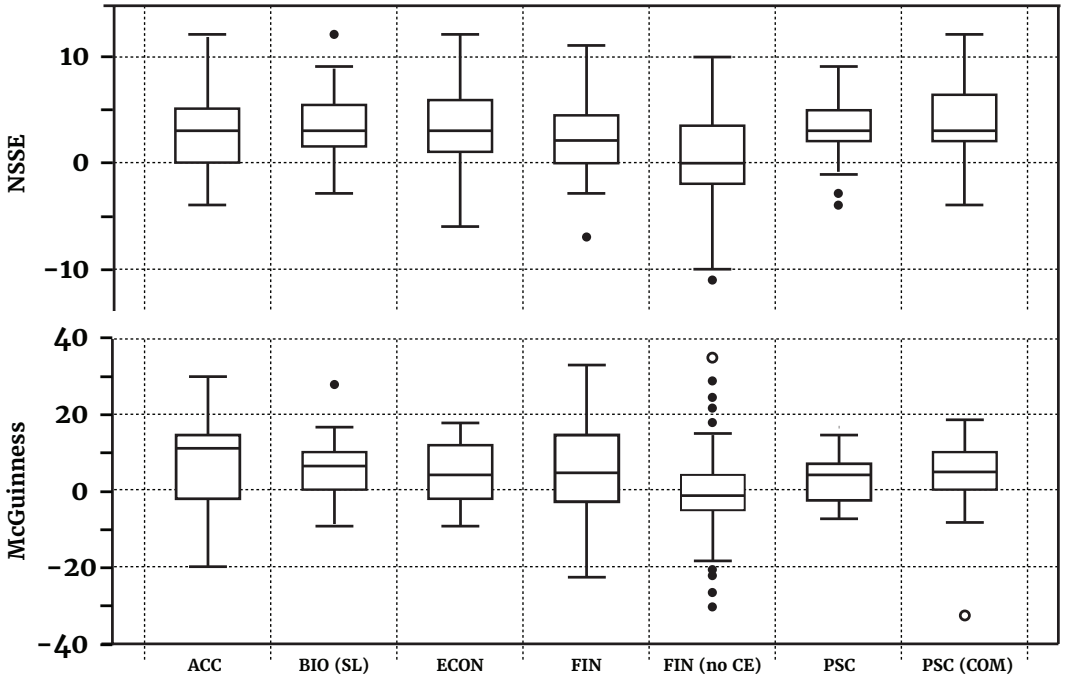
Despite using summative scores rather than raw Likert data, the distribution of NSSE and McGuinness scores did not meet assumptions of normality (NSSE: Shapiro-Wilk test $W = 0.990$, $p$-value = 0.048; McGuinness: Shapiro-Wilk test $W = 0.985$, $p$-value = 0.00653). The unpaired two-sample Wilcoxon test lets us compare NSSE and McGuinness scores among different civic engagement groups without assuming normality of the data. We compared paired groups of students according to the traits of the courses they took: students in civic engagement courses versus those in courses without civic engagement, students enrolled in finance courses with civic engagement versus those without, and students in political science courses with substantial community-based learning versus those without. Finally, we used the Kruskal-Wallis rank sum test to compare among the five disciplines that we surveyed that included civic engagement.

## Results

We collected paired surveys from 275 students in 11 sections of six courses from five disciplines: 176 students in civic engagement courses and 99 in non–civic engagement courses. Mean precourse scores indicate that students arrived in our surveyed courses with some exposure to integrative learning. In some cases, we may not have been able to capture improvement due to students starting our surveyed courses with responses at or near the maximum score. However, when looking at mean responses, our students scored similarly to other samples from Providence College and nationally as reported by the NSSE (Table 2). Summative differences in scores per student varied between -11 and +12 for the seven NSSE-derived survey questions and -32 to +35 for the 31 questions from McGuinness (2015; Figure 1).

Whether we look at the total of our dataset or limit our analysis to students in sections of the same course as our control sections (finance), civic engagement courses had a positive effect on integrative learning (Table 3 and Figure 1). When we compared among political science course sections with different types of civic engagement (community-based versus campus-based), all students showed similar improvements in integrative learning (unpaired two-sample Wilcoxon signed rank test, two-tailed: NSSE $W = 482$, $p$-value = 0.600; McGuinness $W = 400$, $p$-value = 0.176). Lastly, looking among all five disciplines surveyed, the effect of civic engagement on integrative learning was similar (Kruskal-Wallis test: NSSE chi-square = 2.26, $df = 4$, $p$-value = 0.688; McGuinness chi-square = 1.74, $df = 4$, $p$-value = 0.783).

**Figure 1. Boxplots of the Distribution of NSSE and McGuinness Posttest Minus Pretest Difference Summed Across Survey Responses per Student**




*Note*. Responses are grouped by discipline with type of civic engagement indicated ("no CE" for courses without civic engagement; course sections with service-learning and community-based learning are marked SL and COM, respectively). Boxes indicate the first quartile (bottom of box), median (line through box), and third quartile (top of box) of the data distribution. Whiskers indicate the most extreme value within 1.5 times the interquartile range (IQR). Closed circles are outliers within 3 × IQR; open circles are extreme outliers beyond 3 × IQR.

**Table 3. Results of Unpaired Two-Sample Wilcoxon Signed Rank Test One-Tailed**

| | NSSE | McGuinness |
|---|---|---|
| All courses with civic engagement vs. courses without | *W* = 5451.5<br>*p*-value = 1.18e-07 | *W* = 5885.5<br>*p*-value = 3.96e-06 |
| Finance courses with civic engagement vs. finance courses without | *W* = 1899.5<br>*p*-value = 0.000928 | *W* = 1959.5<br>*p*-value = 0.002006 |

## Discussion

Our results support the efficacy of civic engagement courses to improve self-assessed integrative learning. Across disciplines and pedagogical approaches, students completing civic engagement courses scored themselves higher in areas of integrative learning: the ability to integrate knowledge across disciplinary boundaries, curricular and extracurricular experiences, and to understand diverse points of view.

The integration of knowledge occurred across a range of disciplines, civic engagement topics, and pedagogical strategies. As a general education requirement at our institution, civic engagement components have been integrated into courses in social science, humanities, STEM, and business. Some courses are introductory and open without prerequisites, whereas others are upper level courses open only to majors. Perhaps surprisingly, we did not see an effect of community-based versus campus-based learning within the political science courses surveyed. This null result may reflect our small sample size of 31 and 30 students, respectively. Alternatively, this outcome may reflect the utility of both approaches to integrated learning goals whether or not they vary in their effectiveness in meeting high-level civic engagement learning goals.

Overall, our study design limits the conclusions that we can reach from this data. We surveyed courses only at our small, liberal arts institution in the Northeast, and our conclusions may not be broadly applicable to other schools. Even within our institution, the use of self-evaluations of student skills may have been affected by student biases. Analyses based on self-assessed skills have inherent limitations due to their subjective nature, especially when individual students are the unit of analysis (Pike, 2013). Moreover, as students self-selected courses our results may be an effect of student predispositions or other experiences during the course of the semester. Finally, we did not collect student demographic information, such as race, class year, or major, which may have indicated some of these uncontrolled variables. Future research would be necessary to validate our results, including extension to other institutions, analysis of the effects of student demographics, and validation of self-assessed gains in skills.

Our results are consistent with 2017 NSSE scores for our institution and our peer Carnegie Classification schools (Table 2). When we look at courses without civic engagement and precourse surveys, student scores are similar but slightly lower than first-year scores for all surveys at similar schools. Only students at the end of civic engagement courses scored themselves higher than first-year students at peer schools. In fact, postcourse scores for civic engagement courses approach scores for seniors at peer institutions, which may reflect the importance of these courses in producing the gains we see across class years.

On a theoretical level, our findings suggest that the cognitive domains of civic engagement and integrative learning overlap. Although not all civic learning is engaged or integrative and not all integrative learning involves civic engagement, civic engagement, broadly defined to include activities developing personal knowledge and views on public issues to action in the public sphere, can also be listed under the umbrella of integrative learning (Klein, 2005). By encouraging students to consider real-world problems (Huber et al., 2005) and the concerns and views of diverse communities (Luo, 2021), civic engagement meets the goals identified by integrative learning experts. As metrics and outcomes for assessing integrative learning are developed, experts may look to the civic engagement literature for models and approaches that may be helpful in defining this related cognitive domain. For example, a developmental model similar to Williams Howe et al. (2014) might be developed for integrative learning.

By measuring the impact of civic engagement courses on integrated learning, we hope to help higher education institutions value, develop, and integrate civic engagement courses as part of efforts to meet integrated learning goals. Civically engaged courses across disciplines and spread throughout a student's college career may solve problems of faculty workload and institutional support for integrative learning (Lake et al., 2019). Of course, civic engagement courses are valuable in their own right as components of developing citizens for our democratic society (Matto et al., 2017); however, with this research we hope to emphasize the integrated learning dimension of civically engaged courses that may not be given the attention it deserves through being overlooked or assumed without evi-

dence. Our results are broadly consistent with civic engagement research that has noted integrative learning as an outcome (e.g., Liszka et al., 2022; McClellan et al., 2021). However, critiques of civic engagement as not always effective across student identities (Barnett, 2020) and majors (McClellan et al., 2021) may also apply to the integrative learning outcomes of these courses.

Of course, we are not arguing that single civic engagement courses are sufficient to produce integrated learning. In the future, we will compare the impact of civic engagement courses to other strategies and assess learning outcomes directly. With the adoption of ePortfolios in some programs at our institution, we are interested in designing a more rigorous study that can assess the impacts of these two methods in isolation and combination.

To meet integrative learning goals, institutions have employed many different strategies (Huber et al., 2005) beyond pedagogical approaches within specific courses. By establishing the efficacy of civic engagement courses at improving self-assessments of integrative learning goals, our research supports offering civic engagement courses as an early stage of developing more holistic, campuswide strategies for integrative learning. For example, a strategy for growing integrated learning might progress from extracurricular civic experiences and civic engagement in general education courses, to civic engagement in the major, and further develop through capstone work and ePortfolio production. Each piece of such a strategy would contribute to important learning outcomes and form a developmental progression of increasing mastery.

## Conclusion

At our institution, the requirement for all graduates to complete a course that meets civic engagement learning goals has had multiple benefits beyond the direct learning outcomes articulated in the legislation that established the requirement. Currently, departments across schools and disciplines offer civic engagement courses that integrate disciplinary ways of knowing with real-world questions of public concern, offering students rich integrated learning experiences. As we grow new programs for first-year experiences and signature work, we hope to weave integrated learning throughout our students' years at our institution and beyond.

Although our results are preliminary in that they are limited to our institution, they suggest a new area for civic engagement and integrative learning researchers in exploring possible overlaps of these cognitive domains, a pathway for institutions to grow integrative learning organizationally and developmentally for students, and increased incentives for faculty and departments to devote time and resources in developing civically engaged courses.

## Author Note

We have no known conflicts of interest to disclose. Approval for this study was granted by the Institutional Review Board of Providence College, protocol number 17-015-B.

Correspondence concerning this article should be addressed to Maia Bailey, Department of Biology, Providence College, 1 Cunningham Square, Providence, RI 02918. Email: mbailey9@providence.edu

## About the Authors

***Maia F. Bailey*** *(https://orcid.org/0000-0002-1881-6783) is associate professor of biology and director of the Feinstein Institute for Public Service at Providence College. She currently focuses on the scholarship of teaching and learning, looking at the effects of integrating social justice issues into STEM education. She received her PhD in biology from Indiana University.*

***Julia M. Camp*** *(https://orcid.org/0000-0001-8051-5466) is associate professor and department chair of the Accountancy Department at Providence College. Her research interests focus on federal taxation, and accounting and taxation education. She received her PhD in accounting from the University of Kentucky.*

## References


Association of American Colleges and Universities. (2009). *VALUE rubrics—integrative learning*. Retrieved June 3, 2021, from https://www.aacu.org/value/rubrics/integrative-learning

Barnett, R. (2020). Leading with meaning: Why diversity, equity and inclusion matters in U.S. higher education. *Perspectives in Education, 38*(2), 20–35. https://doi.org/10.18820/2519593X/pie.v38.i2.02

Bringle, R. G. (2017). Hybrid high-impact pedagogies: Integrating service-learning with three other high-impact pedagogies. *Michigan Journal of Community Service Learning, 24*(1), 49–63. https://doi.org/10.3998/mjcsloa.3239521.0024.105

Campbell, D. E. (2009). Civic engagement and education: An empirical test of the sorting model. *American Journal of Political Science, 53*(4), 771–786. https://doi.org/10.1111/j.1540-5907.2009.00400.x

Carpenter, S. (2015). Undergraduates' perceived gains and ideas about teaching and learning science from participating in science education outreach programs. *Journal of Higher Education Outreach and Engagement, 19*(3), 113–146. https://openjournals.libs.uga.edu/jheoe/article/view/1220

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. https://doi.org/10.1177/105382591103400205

Conner, J., & Erickson, J. (2017). When does service-learning work? Contact theory and service-learning courses in higher education. *Michigan Journal of Community Service Learning, 23*(2), 53–65. https://doi.org/10.3998/mjcsloa.3239521.0023.204

DeZure, D., Babb, M., & Waldmann, S. (2005). Integrative learning nationwide: Emerging themes and practices. *Peer Review, 7*(4), 24–28.

Egerton, M. (2002). Higher education and civic engagement. *The British Journal of Sociology, 53*(4), 603–620. https://doi.org/10.1080/0007131022000021506

Galvin, J. (2006). Information literacy and integrative learning. *College & Undergraduate Libraries, 13*(3), 25–51. https://doi.org/10.1300/J106v13n03_03

Halonen, J., & Dunn, D. (2018). Embedding career issues in advanced psychology major courses. *Teaching of Psychology, 45*(1), 41–49. https://doi.org/10.1177/0098628317744967

Hancock, T., Smith, S., Timpte, C., & Wunder, J. (2010). PALS: Fostering student engagement and interactive learning. *Journal of Higher Education Outreach and Engagement, 14*(4), 37–60. https://openjournals.libs.uga.edu/jheoe/article/view/798

Holland, B. A. (2001). *Exploring the challenge of documenting and measuring civic engagement endeavors of colleges and universities: Purposes, issues, ideas*. Campus Compact Advanced Institute on Classifications for Civic Engagement. https://compact.org/resource-posts/exploring-the-challenge-of-documenting-and-measuring-civic-engagement-endeavors/

Huber, M. T., Hutchings, P., & Gale, R. (2005). Integrative learning for liberal education. *Peer Review, 7*(4), 4–7.

Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education, 38*(5), 758–773. https://doi.org/10.1080/03075079.2011.598505

Keen, C., & Hall, K. (2009). Engaging with difference matters: Longitudinal student outcomes of co-curricular service-learning programs. *The Journal of Higher Education, 80*(1), 59–79. https://doi.org/10.1080/00221546.2009.11772130

Kinzie, J. (2013). Taking stock of capstones and integrative learning. *Peer Review, 15*(4), 27–30.

Klein, J. (2005). Integrative learning and interdisciplinary studies. *Peer Review, 7*(4), 8–10.

Kratochvil, K. (2013). *Interdisciplinary vs. integrated* [SJSU course materials]. Retrieved June 3, 2021, from https://www2.sjsu.edu/people/kathie.kratochvil/courses/CA177/s0/Interdisciplinary-vs-Integrated.pdf

Kuh, G. (2008). *High-impact educational practices: What they are, who has access to them, and*

*why they matter*. Association of American Colleges and Universities.

Kuh, G. D., Hayek, J. C., Carini, R. M., Ouimet, J. A., Gonyea, R. M., & Kennedy, J. (2001). *NSSE technical and norms report: National survey of student engagement: The college student report*. Indiana University Center for Postsecondary Research and Planning. https://hdl.handle.net/2022/24158

Lake, D., Rabourn, K. E., & Mileva, G. (2019). Catalyzing change through engaged department cohorts: Overcoming the one-and-done model. *Journal of Community Engagement and Scholarship, 12*(1), 41–53. https://doi.org/10.54656/PFKA5783

Lichtenstein, G., Thorme, T., Cutforth, N., & Tombari, M. (2011). Development of a national survey to assess student learning outcomes of community-based research. *Journal of Higher Education Outreach and Engagement, 15*(2), 7–33. https://openjournals.libs.uga.edu/jheoe/article/view/839/838

Liszka, J., Card, R., Clark, P., Coleman, K., Leibensperger, E., Mattingly, R., McGuire, M., Nollenberg, J., VanSlyke-Briggs, K., & Wilson, L. (2022). The Common Problems Project: An interdisciplinary, community-engaged, problem-based pedagogy. *Journal of the Scholarship of Teaching and Learning, 22*(2), 96–118. https://doi.org/10.14434/josotl.v22i2.31645

Luo, J. (2021). Interaction across ideological boundaries and college outcomes. *The Journal of Higher Education, 92*(1), 56–83. https://doi.org/10.1080/00221546.2020.1738162

Matto, E. C., McCartney, A. R. M., Bennion, E. A., & Simpson, D. (Eds.). (2017). *Teaching civic engagement across the disciplines*. American Political Science Association. https://web.apsanet.org/teachingcivicengagement/about/teaching-civic-engagement-across-the-disciplines/

McClellan, F., Kopko, K., & Gruber, K. (2021). High-impact practices and their effects: Implications for the undergraduate political science curriculum. *Journal of Political Science Education, 17*(Suppl. 1), 674–692. https://doi.org/10.1080/15512169.2020.1867562

McCune, V., Tauritz, R., Boyd, S., Cross, A., & Higgins, P. (2021). *The Wicked Problems Project*. https://www.wickedproblems.ed.ac.uk

McGuinness, T. P. (2015). *Creating a whole greater than the sum of its parts: Fostering integrative learning with a reflective ePortfolio process* [Doctoral dissertation, University of Michigan]. University of Michigan Library, Deep Blue Documents. https://hdl.handle.net/2027.42/111547

Mehta, K., Gorski, I., Liu, C., Weinstein, S., Brua, C., & Christensen, A. (2015). Expanding engagement opportunities at a large land-grant research university: The engagement ecosystem model. *Journal of Community Engagement and Scholarship, 8*(2), 44–48. https://doi.org/10.54656/KDYK3110

Morton, K., & Bergbauer, S. (2015). A case for community: Starting with relationships and prioritizing community as method in service-learning. *Michigan Journal of Community Service Learning, 22*(1), 18–31. http://hdl.handle.net/2027/spo.3239521.0022.102

National Academies of Sciences, Engineering, and Medicine. (2018). *The integration of the humanities and arts with sciences, engineering, and medicine in higher education: Branches from the same tree*. The National Academies Press. https://doi.org/10.17226/24988

National Survey of Student Engagement. (2013). *National Survey of Student Engagement instrument*. https://nsse.indiana.edu/nsse/survey-instruments/us-english.html

National Survey of Student Engagement. (2017). *NSSE 2017 overview*. Center for Postsecondary Research, Indiana University. https://web.archive.org/web/20200924012001/https://nsse.indiana.edu/nsse/reports-data/nsse-overview-2017.html

National Task Force on Civic Learning and Democratic Engagement. (2012). *A crucible moment: College learning and democracy's future*. Association of American Colleges and Universities. https://www.aacu.org/publication/a-crucible-moment-college-learning-democracys-future

Newell, W. H. (1999). The promise of integrative learning. *About Campus, 4*(2), 17–23. https://doi.org/10.1177/108648229900400205

Ngai, G., Chan, S., & Kwan, K. (2019). Challenge, meaning, interest, and preparation: Critical success factors influencing student learning outcomes from service-learning. *Journal of Higher Education Outreach and Engagement, 22*(4), 55–80. https://openjournals.libs.uga.edu/jheoe/article/view/1417/1414

Orphan, C. M., & Hartley, J. M. (2021). How change unravels: The failure of ideal-centered organizational change at regional comprehensive universities. *The Journal of Higher Education, 92*(3), 385–409. https://doi.org/10.1080/00221546.2020.1809269

Pike, G. R. (2013). NSSE benchmarks and institutional outcomes: A note on the importance of considering the intended uses of a measure in validity studies. *Research in Higher Education, 54*, 149–170. https://doi.org/10.1007/s11162-012-9279-y

Providence College Faculty Senate. (2010). Bill No. 09-10/01/15. Changes to the Core Curriculum. Providence, Rhode Island.

Richards-Schuster, K., Ruffolo, M. C., Nicoll, K. L., Distelrath, C., & Galura, J. A. (2014). Using ePortfolios to assess program goals, integrative learning, and civic engagement: A case example. *International Journal of ePortfolio, 4*(2), 133–141. http://www.theijep.com/pdf/IJEP150.pdf

Rochford, R. A., & Hock, S. (2010). A letter-writing campaign: Linking academic success and civic engagement. *Journal of Community Engagement and Scholarship, 3*(2), 76–83. https://doi.org/10.54656/YBTP4477

Rockenbach, A., Hudson, T., & Tuchmayer, J. (2014). Fostering meaning, purpose, and enduring commitments to community service in college: A multidimensional conceptual model. *The Journal of Higher Education, 85*(3), 312–338. https://doi.org/10.1080/00221546.2014.11777330

Stubbs, N. J., Feibel, A., & Arcario, P. (2013). Integrative learning in the liberal arts: From cluster to capstone. *Peer Review, 15*(4), 24–26.

Westheimer, J., & Kahne, J. (2004). What kind of citizen? The politics of educating for democracy. *American Educational Research Journal, 41*(2), 237–269. https://doi.org/10.3102/00028312041002237

Williams Howe, C., Coleman, K., Hamshaw, K., & Westdijk, K. (2014). Student development and service-learning: A three-phased model for course design. *International Journal of Research on Service-Learning and Community Engagement, 2*(1), 44–62. https://doi.org/10.37333/001c.002001005