Institutional Type, Organizational Pathways, and Student Engagement: Deepening Student Engagement and the Benefit-Use Paradox in Formal Engagement Spaces

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ABSTRACT

We explore how institutional types relate to individual students' depth and breadth of engagement, and the degree to which organizational pathways can increase the presence of marginalized students in formal engagement structures. Institutional type and organizational pathways increase student engagement, particularly for marginalized students; however, students who participate at high levels are majority white and middle class. This illuminates how institutional type and organizational pathways operate jointly, and not as substitutes.

Keywords: critical service learning, civic engagement, full participation, democratic engagement

While higher education institutions are reconsidering what it means to centralize social justice in various engagement efforts, limited attention is given to the interconnected roles of institutional type and organizational pathways on campuses (Evans, Marsicano, & Lennartz, 2019; Hollander & Burack, 2009). By organizational pathways, we mean to identify specific programs or structures that bring students into service learning and community engagement (SLCE) on their campuses. Unlike institutional types, which are more ingrained within a legal and political history, organizational pathways vary in form and purpose across the field of higher education. While differences in institutional type influence whether there are opportunities on campus for student engagement in SLCE, organizational pathways have the potential to build successful community partnerships and institutionalize an engagement ethos across campuses despite the institutional type (Bringle & Hatcher, 2000; Kiesa et al., 2007; Ostrander, 2004). If scholars and practitioners wish to encourage meaningful, in-depth, reciprocal, and non-exploitative relationships under the framework of critical SLCE, organizational pathways and institutional types must be thought of as joint endeavors in facilitating student engagement (Mitchell, 2008; Saltmarsh & Hartley, 2011; Saltmarsh, Hartley, & Clayton, 2009; Sturm, 2006; Willse, kehal, & Johnson, Forthcoming).

Leveraging the National Assessment for Service and Community Engagement (NASCE) dataset and the Integrated Postsecondary Education Data System (IPEDS) dataset, we ask two questions. First, how does the presence of marginalized students in formal service-learning spaces on campuses differ across institutional types? Second, how are organizational pathways differentially related to individual students' depth and breadth of engagement in SLCE? We merge survey data on the depth and breadth of student participation in SLCE activities with institutional characteristics at four-year institutions to analyze the relationship between institutional type, organizational pathways, and individual student engagement in SLCE. The NASCE measures institutional commitment to SLCE by evaluating the frequency and depth of students' engagement in service

through a unique measure: the "Percent of the Possible" (POP Score) (Levy, Johnson, Cichetti, & Zinkiewicz, 2014). Under a critical service-learning framework, scholars and practitioners cannot simply assess whether students are engaged or not, but they must use metrics that better measure the heterogeneity of student engagement in SLCE. Unlike prior studies that focus on academic success or solely on whether students were engaged or not, the POP Score is an aggregate score of student-reported engagement that incorporates how often students perform service and at what level of intensity (Levy et al., 2014). In using this metric, we are able to better assess to what degree institutional type and organizational pathways influence a student's engagement in SLCE, and the degree to which a student is engaged in SLCE. Though our metric is an improvement from others prioritizing the frequency of student engagement, no quantitative metric can fully measure the qualitative dimensions of authentic relationships under a critical service-learning framework (Mitchell, 2008).

We examine how depth and breadth of individual student engagement levels in SLCE (i.e., POP score) vary across six institutional types—public, private, religious, secular, Historically Black (HBCU), and Carnegie Community Engagement Classified (CCEC) institutions of higher education—to analyze the relationship between student engagement levels in SLCE, institutional type, and organizational pathways. Studying institutional type and organizational pathways together is needed because each influence the depth and breadth of students' engagement in SLCE and may provide avenues for historically marginalized students to participate in service learning (Astin & Sax, 1998). For example, students of color may engage in SLCE through coursework because they have less time to engage outside of it relative to students from relatively privileged backgrounds (Chesler & Vasques Scalera, 2000; Coles, 1999). Our paper considers two pathways—an institution having 1) a Bonner Program and 2) accessible academic engagement through service-learning coursework—as each focus on deep and critical engagement with students and community members. While other types of organizational pathways exist, we focus on the Bonner Program because it takes an integrated approach for student engagement in SLCE. Bonner aims to "provide diverse low-income, under-represented, and first generation students with the opportunity to attend college, while engaging their talents and educations in building and supporting communities" (Bonner Foundation, para. 1). Given Bonner's positive impact on student outcomes relating to dialogue across difference, we use Bonner as a proxy for other types of programs that would be organizational pathways encouraging in-depth, reciprocal, and non-exploitative relationships (Keen & Hall, 2008). Though Bonner's mission and approach are more consistent with critical service learning, they are not synonyms and we caution interpreting it as such. We treat service-learning coursework as an organizational pathway because students participating in this type of academic engagement are bridging the divide between academics and service. Coursework also signifies a regular and academically accountable investment from students without potentially excluding students who have constrained schedules, which is key for historically marginalized students (Coles, 1999).

We use both descriptive statistical analysis and ordinary least squares regression with year fixed effects to explore our research questions. We have two primary findings. First, we identify a benefit-use

1. The Bonner Program is a multi-state consortium composed of more than 15,000 alumni. It operates under a four -year, scaffolded, developmental cohort-based model. The model requires more than 280 hours of service per year and, usually, a full-time summer service internship. The developmental component is meant to integrate experiential, curricular, and co-curricular service and learning into a capstone community-engagement project and reflection presentation at the end of four years.

mismatch: specific institutional types and organizational pathways can increase student engagement levels in SLCE, particularly for Black, Asian, multi-racial, and Indigenous students relative to white students, but our descriptive analyses suggest that students who are engaging with formal campus SLCE programs are majority white and middle class. In other words, relative to white students, students from all other non-white backgrounds are more likely to have higher levels of engagement in SLCE—regardless of institutional characteristics and organizational pathways—yet these students are not presently in the SLCE space. Second, we find that student participation in service coursework and having a Bonner Program on campus positively and significantly impact the depth and breadth of student engagement in SLCE. Our results indicate that service-learning coursework is an important pathway for Black and Indigenous students to participate in SLCE relative to their white peers. For Bonner, which is an institutional-level variable, we find students on Bonner campuses have higher POP scores and Bonner is associated with higher POP scores for students with family incomes below $50,000 and between $50-100,000, relative to students with family incomes above $250,000. Taken together, our findings suggest that across institutional types, students tend to come from more privileged backgrounds in SLCE, but targeted organizational pathways are associated with increased depth and breadth of engagement in SLCE for historically marginalized students.

Given the documented benefits for students who engage in SLCE (Astin, 1996; Bringle & Hatcher, 2000; Cress, Burack, Giles Jr, Elkins, & Stevens, 2010; Finley, 2011), we must continue to reconsider to what extent existing structures of engagement may be exacerbating this benefit-use mismatch and which structures could reconcile it. We frame our questions and our empirical analysis to highlight the roles institutional type and organizational pathways play in increasing student engagement levels in SLCE. While scholars and practitioners often evaluate student engagement by the number of students participating, our questions and modeling suggest that a reframing of evaluation could be fruitful. Namely, by solely focusing on what is associated with increasing individual student engagement, we potentially overlook not only the depth of student engagement, but also the role that campuses play in facilitating and enabling engagement for students (Mitchell, 2008; Saltmarsh et al., 2009). In line with the critical service-learning tradition, our analysis of engagement through the lens of institutional type and organizational pathways places the onus of "low levels of engagement" on how well the institution is facilitating engagement and the type of engagement that is facilitated, rather than on students for not "performing" in a particular way.

The paper proceeds as follows. First, we review how institutional type and organizational pathways facilitate or inhibit student engagement in SLCE, noting how viewing them as joint endeavors is critical for increasing student engagement levels. Second, we explain our data, model, and limitations before discussing the analysis employed for our results. Then we discuss how targeted organizational pathways do reach different student constituencies. Finally, we conclude with comments on the need to question the epistemology of engagement in order to achieve the tenets of critical service learning and decenter the university.

INSTITUTIONAL TYPE, ORGANIZATIONAL PATHWAYS, AND STUDENT ENGAGEMENT IN SLCE

We briefly highlight relevant research on the importance of institutional type and organizational pathways, identifying moments when they jointly can influence student engagement, especially for historically marginalized students. The scholarship on institutional type has often focused on the disparities in the number of

engagement opportunities available for students, presuming if more opportunities existed then students would choose to be more engaged in SLCE. For example, public and private elite institutions have more resources and opportunities for students to become engaged (Kiesa et al., 2007); therefore, a common argument is for resource-limited institutions to provide more opportunities. Yet, institutional type has unique implications for students from historically marginalized communities. HBCUs have been shown to enhance the academic and social growth for Black students, and even after controlling for individual-level measures, students at HBCUs report higher levels of satisfaction with their interpersonal environments than their peers at predominantly white institutions (PWIs) (Flowers, 2002; Outcalt & Skewes-Cox, 2002). While seniors at HBCUs and Hispanic-Serving Institutions have similar academic, satisfaction with college, and engagement outcomes as their peers who attend PWIs, seniors at HBCUs tend to be more engaged than their peers at PWIs (Kim, 2002; Nelson Laird, Bridges, Morelon-Quainoo, Williams, & Holmes, 2007; Outcalt & Skewes-Cox, 2002). In sum, these minority-serving institutions are overcoming their resource disparities relative to PWIs, shifting the focus toward understanding the mutual relationship between environmental supportiveness and student involvement (Outcalt & Skewes-Cox, 2002).

As it pertains to differences between secular and religious institutions, the institutional type can influence the quality of student engagement through its institutional mission. Congruence between institutional mission and infrastructure are positively associated with students engaging in community service and service learning (Evans et al., 2019; Holland, 1997), while a campus's commitment to social activism was positively predictive of students' social activism and community involvement after college (Sax, 2004). For religious institutions, religious affiliation explained differences among students as it concerned faith-based outcomes (e.g., participating in worship, gains in spiritual development, and gains in ethical development), but not along other measures of student engagement (Gonyea & Kuh, 2006).

While institutional type may limit the number of opportunities a campus can offer, organizational pathways can partially remedy this. The difference in student engagement opportunities between commuter and residential campuses are important, but at commuter campuses, tying engagement with academics through academic credit for service learning was identified as a parallel way to promote engagement among commuter students (Bringle & Hatcher, 1996). This is particularly important because organizational pathways for SLCE that are more tied to academics, such as community-based teaching and learning, also increase the engagement of marginalized students in SLCE (Keen & Hall, 2008; Kuh, 2008). Finally, when predicting students' self-assessments of commitment to social change, aspects of institutional type (campus size and selectivity) are negatively associated with these self-assessments, but engagement in service and organizational pathways for SLCE (community-based projects in coursework) are positively associated with these self-assessments (Barnhardt, Sheets, & Pasquesi, 2015). In each of these cases, not only do organizational pathways increase student engagement in SLCE, but the use of organizational pathways helps practitioners overcome limitations associated with institutional type.

DATA

To create a dataset with individual and institutional characteristics, we merge student-level data from the National Assessment of Service and Community Engagement (NASCE) with institutional level data from the Integrated Postsecondary Education Data System (IPEDS), creating a unique dataset of 69,717 students at 80 institutions of higher education, from 2009 to 2018. The NASCE is a web-based survey of

undergraduate students fielded by the Siena College Research Institute in partnership with the Swearer Center at Brown University.

The NASCE measures institutional commitment to community engagement by evaluating the frequency and depth of students' engagement in service (Levy et al., 2014). Institutions pay to have the survey administered, and student participation is voluntary, confidential, and anonymous. Our analysis uses data from the 2009-2018 NASCE Core module, which is one of the four modules within NASCE, because it is the module that measures college students' engagement in SLCE. Response rates range from 10%-41%, and the mean is 18%. IPEDS is a survey of institutional characteristics, conducted annually by the National Center for Education Statistics, that all institutions are required to take part in if they wish to receive federal funding.

Variables

To measure the depth of student engagement in SLCE—the key outcome of interest—we use a unique measure of student engagement in the NASCE survey: the "Percent of the Possible" (POP Score). The POP Score is a composite score of student-reported engagement assessing student service involvement in nine areas of service, and incorporates the frequency and depth of service (Levy et al., 2014). The POP Score is calculated as follows:

*Student POP Score = Engaged in Service * Frequency * Depth*

Where "Engaged in Service" is a dummy variable measuring whether or not a student engaged in an area of service during the academic year, and "Frequency" and "Depth" are categorical variables indicating how often the student is engaged in service, ranging from weekly to annually, and the depth of student commitment to the community-engaged work. To calculate the student POP score, engagement, frequency, and depth are multiplied for each of the nine areas; they are then summed for the total POP score. The student-level POP score ranges from zero to 120: zero participation indicates that the student does not participate in any SLCE, and 120 is a hypothetical maximum participation range, indicating that the student participates fully in nine areas of SLCE. Among the schools in the NASCE, the average POP score is 7.40.

The key explanatory variables include individual-level characteristics and institutional-level characteristics. At the individual level, we focus on five self-reported variables: racialized identity (seven category variable of racial and ethnic identity), annual family income (six category variable on a $50,000 scale), total employed hours worked, college GPA, and whether or not the student participated in service-learning coursework at their institution. At the institutional-level, we focus on our defined institutional types—1) secular, 2) religious, 3) public, 4) private, 5) Historically Black College and University (HBCUs), 6) Carnegie Community Engagement Classified (CCEC)—and include residential status (Basic Carnegie Classification designation), given its relationship with students' engagement in service on campus (Evans et al., 2019). Institutional type is operationalized by six individual indicator variables while residential status is a 10-category composite variable. This measure provides a description of a college or university's size (very small, small, medium, large) and to what degree the institution provides housing accommodations (highly

2. Service categories include: Homelessness, Hunger/nutrition, Elder Care, Youth Services, Civic Participation, Economic Opportunity, Environmental, Religious Service, and Health/fitness.
3. Question measuring engagement in any of the nine areas has the following response options: Yes=1; No=0.
4. Question measuring frequency has the following response options: Once or twice a year=1; Several times a year or once a month=2; Several times a month=3; Weekly or more=4.
5. Question measuring depth has the following response options: Participates at an event or short-term drive =1; Involved on a regular basis for a period of time =2; Deeply involved in a project=3.

residential, primarily residential, primarily nonresidential).

We include variables measuring the Basic Carnegie Classification, which details institutional features and characteristics, and the Carnegie Community Engagement Classification, an elective classification for which institutions can choose to apply. Unlike the Basic Carnegie Classification, the CCEC requires an application process through which the institution self-reports institutional civic and community engagement; the application is reviewed externally in order to receive the Carnegie Community Engagement Designation. For the CCEC, we include an indicator variable for whether institutions were classified in our observed period because the CCEC measures an institution's commitment to community engagement and its integration into coursework, faculty research, and pedagogy.

For organizational pathways, we use indicator variables to identify whether or not the institution participates in the Bonner Program and whether a student took a service-learning course. We are limited by our dataset's confidentiality protections to identify which students take part in their institution's Bonner Program and can only operationalize Bonner Program within our models as an institutional-level variable. To understand its varying relationships with student demographics, our modeling interacts the institution-level variable with individual-level student characteristics. Thus, even though Bonner is measured at the institutional-level, it is an elective program that institutions can choose to offer, making it more in line with an organizational pathway than an institutional type, which institutions have less flexibility to change. For service-learning coursework, we have individual-level data on whether the student took such a course.

Limitations

There are three central limitations to utilizing the NASCE survey data to measure student's engagement in SLCE. First, existing scholarship suggests that the NASCE survey may overestimate service: Engaged students are more likely than disengaged students to complete the survey (Levy et al., 2014; Sax, Gilmartin, & Bryant, 2003). However, our analysis focuses on depth and breadth of participation among students who engage in service learning. Thus, the potential oversample of engaged students is not problematic, as long as students are not overstating the depth of their engagement on campus. Given that this survey was voluntary, and no penalties were associated with not taking part, we have no evidence to suggest that students would systematically do so. Second, students who complete the survey are disproportionately white. When comparing the demographic characteristics of students who responded to the NASCE survey to the demographic characteristics of the entire student body of institutions in the dataset, on average, a higher percentage of student respondents are white (72% compared to 66% campus-wide) or Asian (8% compared to 5% campus-wide). Finally, NASCE establishes a representative sample of each individual campus, but it is not nationally representative (though efforts are underway to make it so). As a result, our analyses do not provide generalizable results; rather, our goal is to explore how individual characteristics, institutional type, and organizational pathways are correlated with the depth and breadth of student participation in service on campus (i.e., student POP scores). For this task, NASCE is well suited for descriptive analyses and for assessing student engagement levels at the institutions it is fielded.

RESULTS

Descriptive Analysis of Institutional Type in Sample

To identify whether there were differential levels of student engagement in

6. The Swearer Center at Brown University is the administrative and research home of the Carnegie Community Engagement classification. More information can be found at https://www.brown.edu/swearer/carnegie.

SLCE across institutional types, we generate cross-tabulations to identify patterns in engagement across institutional types. Building on Levy et al.'s (2014) breakdown of student POP scores, we group students into three levels: High Participation (students with a POP score of 40 or higher), Medium to Low Participation (students with a POP score between 1-40), and No Participation (students who did not report participation). Next, we divide the sample into the institutional types of interest: private, public, secular, religious, HBCU, and CCEC. We display students' characteristics as reported GPA, racialized identity, and annual family income. In this section, we discuss the trends among Low Participation levels, as the trends were similar across High, Medium to Low, and No Participation levels. This is summarized in Table 1.

Table 1 displays the student-level statistics of No Participation across six institutional contexts. We discuss this POP score level because trends were similar across POP score levels, but this level indicated one unique difference. Average GPA across contexts is stable at 3.2, but across five of the six types, the racial and income composition of students is predominantly white and low- and middle-income; at HBCUs, the sixth type, this income trend was similar.

At first glance, this may suggest that institutional type does not matter. We caution against this as the sole or primary interpretation. Among HBCUs, only 13% of the students reported No Participation, relative to students at other institutional types (the High and Medium to Low Participation tables are not shown here for comparison, but can be provided by request). Among all other institutional types, No Participation ranged from 30-50%. Though we do not study why students at HBCUs would be more likely to be engaged relative to not being engaged, HBCUs may have a differ-

Table 1. *Students with No Participation Scores across institutional contexts between 2009-2018.*

	Secular		**Religious**		**Public**		**Private**		**HBCU**		**CCEC**	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
GPA	3.22	0.53	3.27	0.49	3.19	0.54	3.29	0.49	3.05	0.48	3.24	0.52
Racial/Ethnic Identity												
white	0.70	0.46	0.75	0.44	0.71	0.45	0.70	0.46	0.00	0.00	0.77	0.42
Black	0.07	0.25	0.08	0.27	0.06	0.25	0.08	0.28	0.97	0.17	0.06	0.23
Asian	0.09	0.29	0.05	0.22	0.10	0.30	0.06	0.24	0.00	0.00	0.04	0.19
Indigenous	0.01	0.07	0.00	0.06	0.01	0.07	0.00	0.06	0.00	0.00	0.01	0.08
Multi-racial	0.04	0.20	0.04	0.19	0.04	0.19	0.05	0.21	0.03	0.17	0.04	0.19
Other	0.02	0.15	0.02	0.14	0.02	0.14	0.03	0.16	0.00	0.00	0.02	0.13
Latinx	0.07	0.26	0.06	0.25	0.06	0.24	0.08	0.28	0.00	0.00	0.07	0.26
Family Income												
Less than 50k	0.35	0.48	0.27	0.44	0.38	0.48	0.28	0.45	0.39	0.50	0.35	0.48
50k -100k	0.31	0.46	0.27	0.44	0.33	0.47	0.28	0.45	0.24	0.44	0.32	0.46
100k-150k	0.15	0.35	0.16	0.36	0.14	0.35	0.16	0.37	0.15	0.36	0.15	0.35
150k-200k	0.06	0.23	0.08	0.27	0.05	0.22	0.08	0.27	0.21	0.42	0.06	0.24
200k-250k	0.03	0.17	0.03	0.18	0.03	0.16	0.04	0.19	0.00	0.00	0.03	0.16
250k +	0.03	0.17	0.05	0.23	0.02	0.14	0.06	0.24	0.00	0.00	0.03	0.17
N	18222		4466		13476		9212		33		9408	

Note. All variables were dichotomously coded and percentages sum to 1 among racial/ethnic identity and among family income levels. The statistics presented should be read as proportions.

ent arrangement of engagement efforts and structures (i.e., pathways) that move students from low levels of engagement to higher levels of engagement. In addition, our sample has responses from one HBCU. Our next step of analysis examines whether this trend holds net of other individual and institutional characteristics。

Assessing the Relationship between Contexts, Pathways, and Student-level POP Scores

In the second step of our analysis, we use OLS regression to analyze the relationships between student POP scores (our dependent variable) and individual student characteristics, institutional type, and organizational pathways. Specifically, we regress a student's POP scores on individual-level variables (racialized background, annual family income level, college GPA, and hours of employed work a student does per week) and institutional-level variables, six institutional types, and residential status. To address any biases in our estimates derived from time-trends, we also include time-effects from 2009-2018 through annual indicator variables. The results of this regression are shown in Model 1 of Table 2. Table 2 does not show estimates for residential status or year-fixed effects but can be provided by request to the authors.

The individual student characteristics in our model indicate that all students have higher POP scores relative to white students, especially students from Indigenous and "other" racial backgrounds—regardless of other individual characteristics, institutional characteristics, and organizational pathways (the estimates solely for Latinx were not statistically significant). While studies often exclude students from Indigenous backgrounds due to small sample size concerns, we do not have this issue given the survey's design. When we remove students from Indigenous backgrounds from our model, our estimates do not substantively change; thus, we choose to depict them in our table to document this relationship. For family income levels, students from the under $50,000 family income bracket have higher POP scores relative to the highest annual income bracket of families making more than $250,000. Similar in magnitude to these students, students from families in the $150-200,000 income bracket have higher estimated engagement levels compared to the highest income bracket. Finally, students with higher GPAs, who do employed work, and who take part in service-learning courses are also estimated to have higher POP scores; the observed relationship between taking service-learning courses and POP score was one of the most predictive measures in our models. Students who took part in a service -learning course had a POP score 5 points higher than those who did not.

Among institutional-level measures, institutions that were private, were an HBCU, or had a Bonner Program had students with higher POP scores, particularly students at HBCUs (POP score 5 points higher). The relationship was reversed for religious, relative to secular, and CCEC, relative to non-CCEC, institutions, as students who attended them had lower POP scores (only estimates for religious institutions were statistically significant). Finally, residential status had mixed results when concerning POP scores and none of the estimates were statistically significant. While no causal conclusions can be implied from these estimates, a mixture of the institutional size (e.g., small, medium, large) and degree of residential status (e.g., primarily, highly) are both important subdivisions in their own right for understanding how residential status may be related to the students' engagement in SLCE (Evans et al., 2019).

In addition to this model, we also ran three models that interacted the Bonner Program institutional variable with an individual student's racialized and family income backgrounds (Models 2, 3, and 4). Because Bonner is an individual-level program that is measured institutionally, the interactions provide insight into how the presence of a Bonner Program may be play-

Table 2. *Linear regression estimates of Student POP Score.*

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Individual Characteristics					
white	-	-	-	-	-
Black	1.13**	1.13*	1.21*	0.68	0.69
	(2.86)	(2.20)	(2.34)	(1.17)	(1.51)
Asian	1.76***	1.38*	1.42**	1.05	1.46**
	(4.34)	(2.54)	(2.60)	(1.73)	(3.21)
Indigenous	2.71*	3.34*	3.41*	1.26	0.71
	(2.04)	(2.18)	(2.23)	(0.68)	(0.44)
Multi-racial	1.64***	1.80**	1.81**	1.66*	1.50**
	(3.64)	(3.04)	(3.07)	(2.48)	(2.85)
Other	3.95***	3.46***	3.50***	4.13***	4.46***
	(6.37)	(4.24)	(4.29)	(4.58)	(6.51)
Latinx	0.50	0.63	0.73	0.64	0.40
	(1.28)	(1.34)	(1.54)	(1.17)	(0.88)
Less than 50k	1.04***	1.04***	0.36	0.38	1.18**
	(3.31)	(3.33)	(0.87)	(0.77)	(3.11)
50k -100k	0.43	0.43	-0.23	-0.50	0.31
	(1.40)	(1.40)	(-0.59)	(-1.06)	(0.84)
100k-150k	0.52	0.53	0.17	0.29	0.72
	(1.53)	(1.53)	(0.37)	(0.55)	(1.75)
150k-200k	1.09*	1.09*	0.84	0.76	1.10*
	(2.49)	(2.50)	(1.49)	(1.13)	(2.13)
200k-250k	0.71	0.70	0.33	0.42	0.88
	(1.25)	(1.24)	(0.45)	(0.49)	(1.31)
250k or more	-	-	-	-	-
GPA on 4.0 scale	2.09***	2.10***	2.10***	2.12***	2.10***
	(10.05)	(10.06)	(10.11)	(10.12)	(10.07)
Hours Worked	0.86***	0.86***	0.86***	0.86***	0.86***
	(8.15)	(8.14)	(8.09)	(8.09)	(8.16)
Student Partici-pated in Service Coursework	5.03***	5.03***	5.02***	4.67***	4.93***
	(19.61)	(19.63)	(19.57)	(8.48)	(9.14)

Institution-Level Characteristics					
Carnegie Classified	-0.43	-0.43	-0.43	-0.44	-0.44
	(-1.59)	(-1.59)	(-1.58)	(-1.63)	(-1.63)
Private	0.86*	0.88**	0.84*	0.83*	0.85*
	(2.57)	(2.61)	(2.50)	(2.47)	(2.53)
HBCU	5.85***	5.86***	5.82***	6.10***	6.21***
	(4.12)	(3.99)	(3.96)	(4.13)	(4.34)
Bonner Program	1.20***	1.17***	0.06	0.01	1.20***
	(4.50)	(4.12)	(0.11)	(0.01)	(4.49)
Bonner Interactions					
Black * Bonner		-0.00	-0.20	-0.00	
		(-0.01)	(-0.26)	(-0.01)	
Asian * Bonner		0.80	0.72	0.86	
		(0.99)	(0.89)	(1.06)	
Indigenous * Bonner		-2.56	-2.78	-1.85	
		(-0.84)	(-0.90)	(-0.59)	
Multi-racial * Bonner		-0.37	-0.44	-0.37	
		(-0.40)	(-0.48)	(-0.40)	
Other * Bonner		1.16	1.05	0.68	
		(0.93)	(0.83)	(0.54)	
Latinx * Bonner		-0.41	-0.67	-0.65	
		(-0.51)	(-0.82)	(-0.78)	
Less than 50k * Bonner			1.64**	1.67**	
			(2.63)	(2.62)	
50k -100k * Bonner			1.60**	1.69**	
			(2.61)	(2.71)	
100k-150k * Bonner			0.88	0.83	
			(1.27)	(1.18)	
150k-200k * Bonner			0.60	0.65	
			(0.68)	(0.72)	
200k-250k * Bonner			0.91	0.88	
			(0.79)	(0.75)	

Coursework Interactions					
Black * SLC				1.77*	1.77*
				(1.97)	(1.99)
Indigenous * SLC				6.07*	6.32*
				(2.10)	(2.21)
Multi-racial * SLC				0.50	0.53
				(0.49)	(0.52)
Other * SLC				-2.73	-2.90
				(-1.67)	(-1.80)
Latinx * SLC				0.27	0.34
				(0.32)	(0.40)
Less than 50k * SLC				-0.25	-0.57
				(-0.36)	(-0.85)
50k -100k * SLC				0.94	0.59
				(1.41)	(0.90)
100k-150k * SLC				-0.55	-0.80
				(-0.72)	(-1.06)
150k-200k * SLC				0.15	-0.04
				(0.15)	(-0.04)
200k-250k * SLC				-0.44	-0.70
				(-0.34)	(-0.55)
Constant	1.10	1.19	1.62	1.80	1.10
N	18020	18020	18020	18020	18020

Notes. Participating in service-learning courses was dichotomously measured at the individual-level and Bonner was measured dichotomously at the institutional level. For racialized identity, the reference category is white; for family income, the reference category is students from families with incomes of more than $250,000. Estimates for time fixed-effects and residential status are not shown. T statistics are noted in parentheses. * $p<0.05$, ** $p<0.01$, *** $p<0.001$

ing out among students. Given that the Bonner Program is targeted toward historically underserved students and Model 1 treats it as an institutional context variable, the additional step of interaction effects enables us to better parse out whether an institution having a Bonner Program differentially impacted students from different racialized and family income backgrounds. In other words, we examine whether having an organizational pathway on campus is associated with higher student engagement levels in SLCE.

These estimates reveal that an institution with a Bonner Program does not necessarily mean that students from racially marginalized backgrounds will be more engaged relative to white students because the Bonner Program is on campus. In Model 3, in which we interact the Bonner Program with all racialized and family income background variables, we observe that an institution having a Bonner Program is associated with slightly higher POP scores for students from the two lower income brackets relative to students in the highest income bracket, net of other explanatory variables. Noticeably in Model 3, the main coefficients for students' racialized background remain unchanged in relative magnitude and statistical significance. In contrast to the higher engagement levels associated among lower income students when a Bonner Program is on campus, students from Black, Asian, Indigenous, multi-racial, and "other" backgrounds are not necessarily impacted by the Bonner Program's presence on campus.

In a final set of models (Models 4 and 5, Table 2), we interacted taking a service-learning course with student background to assess the differential relationships that an organizational pathway can have for students from different racialized and income backgrounds. Unlike Model 2 or 3 wherein Bonner was interacted with racialized background with no significant estimated relationship, the interaction estimates in Model 4 and 5 indicate that Black and Indigenous students benefited the most from service-learning coursework. Furthermore, the main coefficients for service-learning coursework in Model 4 and 5 remain positive, significant, and sizeable (4.67 and 4.93). This interaction would also explain the change in the Model 4 and 5's main coefficients for Black and Indigenous students, as these students benefit from this pathway.

We choose to interpret the interaction coefficients of Models 2-5 for the sake of brevity, but it is worth noting that the institutional-level estimates across models did not substantively change. Though we cannot compare the magnitude of coefficients across different regression models, the estimates in Models 2-5 suggest that once we control for a particular type of interaction effect between student background and an organizational pathway, these distinct organizational pathways may reach different constituencies on campus. The Bonner program and service-learning coursework offer organizational pathways to improving diversity in SLCE, particularly for Black, Indigenous, and lower income students. Together, this indicates the importance of organizational pathways encouraging more depth and breadth in SLCE.

DISCUSSION

Our findings reveal a benefit-use paradox: those students most likely to engage in service at higher levels of depth and breadth are not observed engaging at higher levels in reality. In line with prior research, institutional contexts, such as being a secular, religious, public, or private institution, continue to have a relationship with the depth and breadth of student engagement in SLCE. Though not all institutional contexts are equal: students who attend HBCUs have higher levels of student engagement in service in their depth and breadth, as they are likely to have a POP score that is over five points higher than students at non-HBCUs. Importantly, we have one HBCU in our sample for comparison, but this finding is in line with prior research. Similarly, students

who take part in service-learning coursework have much higher levels of depth and breadth in their engagement in service, with a magnitude of increasing a student's POP score by five points. Finally, relative to white students, students from Black, Asian, Indigenous, multi-racial, and "other" backgrounds have higher levels of engagement in SLCE—regardless of institutional characteristics and organizational pathways (Model 1, Table 2). And yet, as Table 1 depicts, these students are observed as engaging in service at lower levels on campuses.

Our paper examined how the depth and breadth of student engagement in SLCE is understood when jointly considering organizational pathways and institutional type. Because changing an aspect of the institutional types we have studied, such as secular, religious, public, or private status, HBCU, and CCEC, is a difficult path for an institution, institutions must consider the unique role that organizational pathways play in reaching different student constituencies. For example, our findings suggest that the presence of an organizational pathway that is committed to reaching out to students from demographically diverse, low-income, under-represented, and first-generation backgrounds is associated with students having higher levels of SLCE in depth and breadth (Table 2, Models 1 and 2). Though the benefits of having such a program may not be equally shared by all those who are targeted for outreach: Students from lower family incomes are more likely to be engaged on campus through the Bonner Program, but the same cannot be said for specifically reaching racially minoritized students, and the reverse holds for service-learning coursework (Table 2, Models 2-5). Importantly, it is entirely possible that the students from lower income backgrounds are non-white students and the Bonner students are also engaged in coursework, as this would not be captured by our modeling specifications. Our results indicate that an organizational pathway targeted towards more in-depth engagement may reap benefits for the campus engagement infrastructure, but organizational pathways must be intentionally crafted if they wish to reach students who are most likely to be deeply engaged.

CONCLUSION

Echoing Evans et al. (2019), we ask whether higher education is an effective structure for increasing community engagement under its current operating structure. As we state at the start, we frame our study to highlight the role institutional types and organizational pathways play in increasing student engagement levels in SLCE. Our findings underscore the importance of academic connection and integration in SLCE as one way to address the benefit-use paradox. As such, organizational pathways should be strongly connected to and integrated with the academic life of students to make the SLCE space more accessible to students who would benefit from the engagement. Because institutions that have Bonner Programs have more aggregate student engagement in SLCE, a more intentional effort to reach students of color could be effective.

Given that the two pathways we study rely on altering the present dynamic between SLCE and academic engagement, we contend the university must be epistemologically decentered. By this, we mean that the institution must re-conceptualize what it means to educate students, what it means to be part of a local and global community, and abandon its exclusive claims to knowledge production and legitimation (kehal, Garbes, & Kennedy, 2019; Mitchell, 2008; Willse et al., Forthcoming). Decentering would include community partners' knowledge as co-educators/co-creators outside the formal boundaries of the academy, and would help move institutions towards epistemic justice (Fricker, 2007). Such a fundamental paradigm shift is still needed because if scholars only focus on who is or is not engaging in SLCE, it may ignore the narrative around what makes engagement possible for some students and exclusionary

to others, and whether intentional efforts are made to reach students who would deeply engage in SLCE.

The classroom provides one very effective avenue through which to alter an institution's epistemology and to reach students who are currently not in the SLCE space because it raises questions on how knowledge is valued and meets students where they are. Organizational pathways that take seriously the academic component for engagement can reach racially and economically marginalized students with intentional and targeted planning, while also raising the levels of breadth and depth of student engagement. Following this academic synergy would place institutions more in line with the critical service-learning tradition because campuses could more fully consider what partnerships mean with community members and with their own students.

As more tenets of critical service learning enter the classroom to be debated and considered, students and staff are potentially exposed to the underlying, exploitative relationships between universities and their local communities. A shift toward focusing on epistemology of engagement would actualize a tenet of critical service learning wherein "a campus commitment to partnership can funnel financial resources into a community, generate interest in and attention to issues facing the community, and break down town-gown barriers" (Mitchell, 2008, p. 61). To epistemologically de-center the university would fundamentally alter the role of higher education institutions in society, and subsequently, their valuing of historically marginalized students' engagement in SLCE. To do so would require a structural change; we suggest challenging the current epistemology of engagement is a foundational starting point.

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