



# RESEARCH BRIEFS

## Linking Faculty Involvement in High-Impact Practices to First-Year Student Participation

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### Summary:

Tasked with developing, encouraging, and participating in highly impactful educational experiences, faculty serve in roles vital to first-year student success. Known for benefiting many students, high-impact practices assist institutions in promoting a variety of outcomes ranging from retention to civic engagement. Using data from the National Survey of Student Engagement (NSSE) and the Faculty Survey of Student Engagement (FSSE), we investigated the relationship between faculty emphasis and participation in high-impact practices with first-year student participation at over 80 diverse four-year institutions. We found that faculty values for participation are positively related to student participation, but faculty involvement in more high-impact practices could decrease student participation. Administrators should consider ways to support their faculty in providing these experiences and to assess potential barriers for providing equitable quality high-impact practices.

### Problem Statement:

Faculty frequently author learning outcomes, design assessment measures, and provide educational experiences, such as high-impact practices, to promote student learning. Given the deep involvement of faculty in high-impact practices, coupled with the idea that students' first-year experience is paramount for success, it follows that researchers should closely examine faculty perceptions of participation in these practices. While not all faculty can participate in high-impact practices due to resource constraints, faculty encouragement of the practices may bolster first-year development considering the positive outcomes associated with student participation.



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## Background:

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Scholars describe high-impact practices as carefully constructed educational practices that promote myriad student outcomes (e.g., sense of belonging, democratic engagement, and resilience; Ribera et al., 2017; Weiss & Fosnacht, 2018; Yeh, 2010). High-impact practices are often associated with an improved sense of belonging among first-year students, which in turn is linked to student success, including integration into the collegiate community (Ribera et al., 2017). Within the structure of undergraduate curriculum at four-year institutions, first-year students often have the opportunity to participate in the following high-impact practices by the end of their first year: learning communities, service-learning courses, and undergraduate research (Weiss & Fosnacht, 2018). Learning communities are frequently comprised of students intentionally taking two courses together designed under a theme, while service-learning courses entail structured experiences where students participate in a community service project as part of the class. Undergraduate research experiences often consist of individual student or group projects under the focused supervision and mentorship of faculty.

Some scholars believed students should aim to complete at least two high-impact practices before graduation, one during the first year (to cement students' commitment to their institution) and another during the senior year (to prepare for transitioning out of higher education and into a career; Kuh, 2008). Yet, high-impact practices may be associated with imbalanced benefits and participation rates among students. For example, not all high-impact practices may improve student persistence rates, and differential access can prevent students from engaging in these experiences (Johnson & Stage, 2018). Additionally, first-year first-generation students participate in service-learning more than their counterparts (NSSE, 2019). This is in large part due to a desire to support communities similar to those where they grew up (Yeh, 2010).

Faculty play an important role in high-impact practices, but the time-consuming nature and increased financial expenses associated with high-impact practices often deter faculty from facilitating experiences (White, 2018). Students who report positive faculty interactions often demonstrate greater participation in high-impact practices (Brckalorenz et al., 2017). Faculty who emphasize or encourage student participation in high-impact practices may also promote more reflective and integrative learning in their courses (e.g., combining ideas across courses, understanding others' perspectives, etc.; Fassett & Brckalorenz, 2020). But faculty participation is varied, sometimes by discipline; for instance, faculty in physical sciences tend to emphasize high-impact practices less than their colleagues in education and health professions (Fassett & Brckalorenz, 2020). Additionally, participation, as well as an emphasis on student participation, varies by faculty demographics and characteristics (Fassett & Brckalorenz, 2020; Webber et al., 2013). Often the most variation occurred among race/ethnicity, degree attainment, academic rank, and discipline (Fassett & Brckalorenz, 2020; Webber et al., 2013).

While faculty participation and their support of student participation differ, less is known about how faculty participation in high-impact practices relates to student participation for first-year students (Webber et al., 2013). Given that scholarship consistently demonstrates the crucial nature of the first-year experience and the role of faculty with high-impact practices, the following research questions were used to guide our inquiry:

- How often do students and faculty participate in learning communities, undergraduate research, and service-learning? Which practice do faculty generally find the most important for undergraduates at their institution to participate in before they graduate?
- What is the relationship between faculty importance and participation in high-impact practices and first-year student participation?

## Methods:

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In this study, we used data from the 2020 administrations of the National Survey of Student Engagement (NSSE) and Faculty Survey of Student Engagement (FSSE). The surveys, administered during the spring semester at participating institutions, examine student and faculty time or effort put toward meaningful academic experiences at four-year colleges and universities. The sample consisted of 83 diverse institutions across the United States, yielding over 27,000 first-year students and 12,000 faculty responses. Both students and faculty responded to whether they took part in a learning community, service-learning experience, or undergraduate research. We combined, respectively, the responses to create a cumulative measure of participation in these three practices. This measure, therefore, could range from participating in none of these practices up to participation in all three. Additionally, faculty were asked how important they found student participation to be in the three high-impact practices.

We combined the responses from faculty at each institution to create an aggregate measure of faculty importance of, and participation in, the three high-impact practices under investigation. These served as independent variables in ordinary least squares regression models that predicted first-year student participation in these high-impact practices. We controlled for differences in student (e.g., race/ethnicity, gender identity, sexual orientation, academic major, ability, first-generation status) and institution characteristics (e.g., Carnegie Classification, public/private). It is important to note our findings are descriptive and correlational, meaning that they describe relationships between the variables; the findings cannot speak to causality, or the direct influence of faculty involvement in high-impact practices on student participation, as other unaccounted factors could affect the relationship. They do provide valuable insight on the relationship between faculty and students' participation in learning communities, service-learning, and undergraduate research.

## Findings:

We found that first-year students tended to participate in service-learning (53.2%) most frequently followed by learning communities (12.4%) and undergraduate research (4.8%; Table 1). This pattern followed with faculty participating in service-learning (55.4%) the most but contrasted in the fact faculty reported engaging more in undergraduate research (45.7%) than learning communities (27.9%). Given faculty participation, it is not surprising faculty emphasis on student participation in these high-impact practices followed the same results; faculty found service-learning to be the most important

for undergraduates to engage in, followed by undergraduate research and then learning communities (Table 2).

Considering (mis)alignment between student and faculty participation, institutions may want to determine if such patterns support their goals or mission concerning student learning and engagement. When accounting for a variety of student and institutional characteristics, the more importance faculty placed on student participation in high-impact practices, the more students tended to participate (Table 3). However, faculty participation in high-impact practices was negatively related to student participation. It is possible that at institutions where faculty oversee multiple high-impact practices, they are spread too thin to support multitudes of students.

**Table 1**

*High-Impact Practice (HIP) Participation*

	Student		Faculty	
	Count	%	Count	%
Individual Participation				
Learning Communities	2,545	12.4	3,141	27.9
Service Learning	10,827	53.2	5,708	55.4
Undergraduate Research	979	4.8	5,157	45.7
Cumulative Participation				
None	8,348	41.3	2,328	22.8
One HIP	9,833	48.6	3,569	35.0
Two HIPs	1,757	8.7	2,978	29.2
Three HIPs	295	1.5	1,325	13.0

**Table 2**

*Faculty Importance of High-Impact Practices*

	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>SD</i>
Learning Community	11,936	1	4	2.58	0.96
Service Learning	11,915	1	4	2.86	0.92
Undergraduate Research	11,934	1	4	2.73	0.90
Cumulative Emphasis	11,820	3	12	8.16	2.06

**Table 3**

*Faculty Participation and Importance Placed on High-Impact Practices Predicting Student Participation*

	<i>B</i>	<i>S.E.</i>	<i>Sig.</i>
Faculty Importance	0.364	0.041	***
Faculty Participation	-0.122	0.051	*

\* $p < .05$ , \*\*\* $p < .001$ ; standardized outcomes; controls include race/ethnicity, gender identity, sexual orientation, ability status, academic major, first generation status, Carnegie classification, private/public control.

## Conclusion:

We found that there is a relationship between faculty and student participation in high-impact practices. Namely, faculty values appear positively related to student participation. Although studies of individual high-impact practices have found a positive relationship between faculty and student participation (Webber et al., 2013), our findings imply that over-involvement of faculty may hinder student participation. In summary, we feel it is important to:

- educate faculty about the importance of encouraging student participation in high-impact practices and the known benefits for students;
- provide faculty resources (e.g., time, economic, and merit) so that they may develop and participate in high-impact practices;
- create systems that allow institutions to better assess and understand the effects of faculty on high-impact practices;
- give thought to teasing out various student experiences among populations within high-impact practices; and
- benchmark faculty participation and importance placed on high-impact practices using national resources (e.g., FSSE's interactive dashboard; FSSE, n.d.).

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