

Involving Online Students in High-Impact Practices

Abstract

Using a large-scale survey of student engagement, this study examined the extent to which taking all online courses affects senior students' participation rates in high-impact practices (HIPs), such as internship and study abroad. Online students' perceived gains in knowledge, skills, and personal development were also examined by whether or not they participated in a HIP. Overall, findings revealed that online students' participation rates in HIPs were relatively lower than students who did not take all of their courses online. Of the six HIPs, online students engaged most in service-learning experiences as part of a course requirement and least in study abroad. Online students who participated in a HIP reported greater gains in knowledge, skills, and personal development compared to online students who did not participate in a HIP. This study suggests institutions should pay special attention to the needs of online students and develop strategies for promoting their HIP participation.

Research Questions

- To what extent do college students who took courses entirely online participated in high-impact practices?
- How does online students' participation in high-impact practices differ from the engagement in HIPs of students who took some or none courses online?
- What is the relationship between online students' participation in high-impact practices with their perceived gains in learning and development?

Methods

Data Source 2015 National Survey of Student Engagement (NSSE)

Samples This study focused on senior college students. Among the 127,753 senior participants, 13,122 participants (10.3%) identified themselves as taking all courses online.

Measures

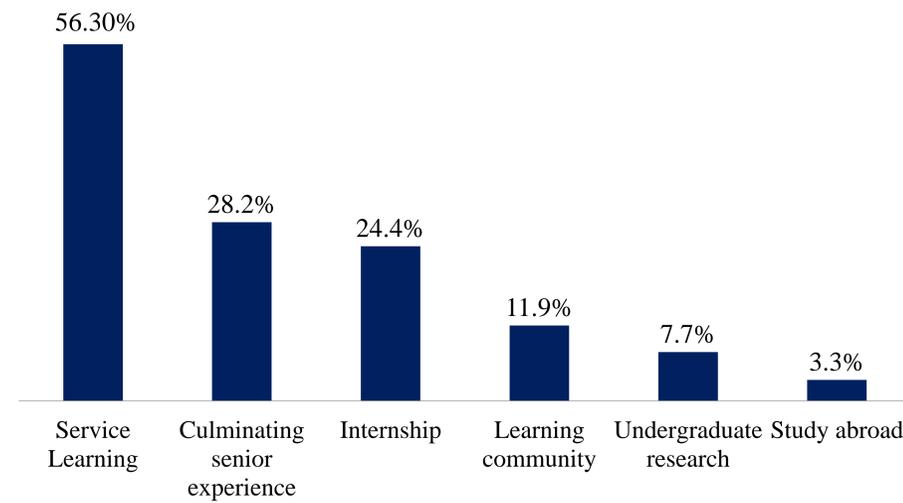
- The **six high-impact practices (HIPs)** examined in this study were: internships, undergraduate research with faculty, learning community, culminating senior experience, service-learning as part of a course requirement, and study abroad.
- The outcome variable, **Perceived Gains in Learning and Development (PG)**, is a scale composed of 10 variables that measure students' gains in personal, practical, and general education competency areas.

Analyses T-tests were used to examine the differences in HIP participation between online students and non-online students. By using OLS regression, we explored the relationship between HIP participation and students' perceived gains. All six HIPs were entered in the regression model along with student characteristics (gender, race/ethnicity, first-generation status, transfer status, majoring in a STEM field, and enrollment status).

Sample (N = 127,753)

Female 64.6%	Hispanic or Latino: 10.9%
Full-time: 83.7%	Native Hawaiian or Other Pacific Islander: .5%
First generation: 47.0%	White: 65.8%
American Indian/Alaska Native: .6%	Two or more races/ethnicities: 2.9%
Asian: 4.3%	Other /Foreign/Unknown: 6.9%
Black or African American: 8.1%	

HIPs Participation Rates of Online Senior Students



The Differences in HIP Participation between Online and Non-online Senior Students



HIPs	Student Status	Mean	Std. Deviation	Std. Error Mean	Sig.	Effect Size
Internship	Non-online	.56	.496	.001	***	.65
	Online	.24	.429	.004	***	
Learning community	Non-online	.28	.448	.001	***	.36
	Online	.12	.324	.003	***	
Study abroad	Non-online	.17	.376	.001	***	.38
	Online	.03	.179	.002	***	
Undergraduate research	Non-online	.28	.447	.001	***	.46
	Online	.08	.267	.002	***	
Culminating senior experience	Non-online	.51	.500	.001	***	.46
	Online	.28	.450	.004	***	
Service Learning	Non-online	.65	.478	.001	***	.18
	Online	.56	.496	.004	***	

Note: *** p<.001 (2-tailed).

The greatest difference in HIP participation between online and campus-based students was in **internship**, and the smallest difference was in **service-learning**.

The Relationship between HIP Participation and Student Perceived Gains in Learning and Development

As the Ordinary Least Squares regression results shown, after controlling for student characteristics, a positive and strong relationship was found between engaging in four out of six HIPs and online seniors' perceived gains in knowledge, skills, and personal development ($F = 5.602, p < .001$): learning community ($B = .174, p < .001$); undergraduate research with faculty ($B = .203, p < .001$); culminating senior experience ($B = .129, p < .001$); and service learning ($B = .443, p < .001$). Engaging in internship and study abroad does not have a significant relationship with online students' perceived gains. R^2 equaled .03 indicated that 3% of the variance in students' perceived gains can be explained by online students' HIP participation.

HIP	Relationship
Internship	---
Learning community	+++
Study abroad	---
Undergraduate research	+++
Culminating senior experience	+++
Service learning	+++
Male	---
American Indian or Alaska Native	---
Asian	+++
Black or African American	+++
Hispanic or Latino	+++
Native Hawaiian or Other Pacific Islander	---
Other	---
I prefer not to respond	---
First-generation	+++
Transfer student	+++
STEM majors	---
Full-time	+++

Key:
 +++ p<.001; B>0; ---, p<.001; B<0
 ++, p<.01; B>0; --, p<.01; B<0
 +, p<.05; B>0; -, p<.05; B<0

Implications

Institutional researchers who desire to promote online students' HIP participation should first understand what HIP experiences should look like for online students.

Faculty members can consider how to promote online students' HIP participation through adjusting curriculum design.

Institutions should create more channels for online students to participate in HIPs beyond face-to-face interactions. For example, service-learning experiences can be obtained by online students through developing websites or maintaining social media sites for the community. Undergraduate research can be achieved by using video conferences, and learning community can also become implemented in a virtual context.