

## Assessing the Impact of High-Impact Practices: A Critical Quantitative Approach to Assess Access, Equity, and Outcomes of HIP Participation

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Despite decades of research on high-impact practices (HIPs), there remains a limited understanding of how all students can benefit from HIPs. In this session, we share our critical quantitative approach to assess HIP participation and components that truly make HIPs “high-impact” at a large, urban, public HSI and AANAPISI. This work documents factors leading to participation, and the impact of internship, research, and service learning participation on undergraduate student retention while controlling for selection bias. We aim to inspire webinar participations to replicate this work at their institutions.

### **Steps and considerations to replicate this work at your institution:**

1. Consider the scope of your work and the variables you want to assess. *What We Learned Tip:* Determine how many offices, different divisions, or programs house the different data you need. For example, student demographics may be housed in a different division than responses to surveys like the National Survey of Student Engagement (NSSE), which may be housed in a different location than enrollment information for courses. All these different divisions may require different procedures to access data- prior even to IRB submission.
2. Check in with administrators when finalizing lists of HIPs course names. Sometimes the same HIPs are called different names, and sometimes different HIPs have the same name. *What We Learned Tip:* Talk to people in each college or department to understand where courses actually fit. For example, in some departments, ‘field experience’ fit more into the ‘internship’ category and in others it was a ‘research’ course. Also watch for courses that sound like a HIP, but are not- such as a Research Methods lecture course.
3. Upon receiving data, check variables and labels using a codebook. *What We Learned Tip:* To merge files, all data sets must have a common identifier. Student ID is the best primary field to merge files; however not all data sets contained student IDs, or IDs were listed in a different format.
4. Save the final merged version and begin exploring the data by running frequencies, crosstabulations, bar charts, means, and other descriptive statistics. *What We Learned Tip:* Missing data is a huge issue on surveys and can lead to small Ns. Determine how much data is missing and plan on how you will address it before running statistics that you then have to toss due to low numbers.
5. Determine how to address selection bias because it is unlikely that random assignment was used to require participation (i.e., propensity score matching (PSM) or weighting your sample by propensity to participate). *What We Learned Tip:* Weighting our sample by students’ propensities to participate in HIPs helped retain our Ns and was less time consuming than PSM.
6. As you analyze the data, which race/ethnicity group will you use as the reference group? Typically, the majority group serves as the reference category in regression analyses; how does/should that play out at your institution? *What We Learned Tip:* Our campus majority group are Latina/x/o students; however, we were interested in knowing the experience of different demographic groups as compared to White students to compare with literature and to understand the intersection with social privilege. We ran the analyses twice and compared results.
7. As you report and disseminate findings be proactive in sharing your results with people who need to know. *What We Learned Tip:* We aligned our results with a large initiative happening on campus, and reached out to share our results with people who were invested in the initiative. This helped get our suggestions on the radar of people making decisions.