

How High is the Impact? Engaging student voices in the conversation of High Impact Practices (HIPs) in Higher Education

ASHE Proposal

Jaclyn K. Rivard, Sarah J. Cox, Andrea L. Beach

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Study Objectives or Purpose

The purpose of this study was to get to the heart of student voices around High Impact Practices (HIPs) as reflected in the National Study of Student Engagement (NSSE) at a large, public, higher research activity, doctoral granting institution in the Midwest. An initial look at institutional history and the literature revealed that, while quantitative data are regularly reviewed, analyzed, and discussed, no work has been done using qualitative NSSE data to examine the student voice—at our institution or nationally. Dugan and Silberstein (2017) discussed rich insights available in the open-ended comments, but noted that the data are often overlooked because they can be messy to address. These presenters also suggested use of text analysis for the work, but did not do the analysis themselves. Sanchez, Copridge, Clark and Cole (2017) undertook a qualitative thematic analysis that examined student persistence and barriers to persistence, and BrckaLorenz, Yuhas, and Zilvinskis (2017) did some limited qualitative analysis to assess the language of the NSSE open-ended questions. An in-depth literature search affirmed the dearth of this type of analysis; little to nothing is being done overall with the qualitative NSSE data (Chambers, 2010). Disregarding or only superficially reviewing qualitative data silences and excludes the student voice from discussions of whether and how HIPs and other practices are contributing to the student experience. This work examined those

qualitative comments in light of the quantitative results, with a stronger focus on the former in order to amplify student voices.

In the 2008 report, *High-impact Educational Practices*, Kuh identified six common elements of high impact practices: they demand that students interact with faculty and peers about substantive matters, they help students build substantive relationships, participation in them increases the likelihood that students will experience diversity, they typically provide students with frequent feedback, they provide opportunities for students to see the application of their knowledge in various settings, and they help students contextualize their place in the larger world and connect to it. High Impact Practices are widely tested and have demonstrated impact for students from a wide range of backgrounds (Kuh, 2008), and are an effective way to increase student retention among undergraduates (Kuh, 2009). High impact practices “require students to communicate with classmates and professors about meaningful topics; expose students to diverse ideas and people of different backgrounds; provide students with regular assessments of their work; enable students to apply their knowledge within and beyond the classroom walls; and possess a powerful potential to change the course of students’ lives” (Kilgo, Sheets, & Pascarella, 2015. p. 511).

This study looked specifically at HIPs measured in the NSSE; these include learning communities or some other formal program where students take two or more classes together; courses with community-based projects (service learning); work with a faculty member on a research project; internship, field experience, student teaching, or clinical placement; study abroad; and culminating senior experiences. These practices are often used as benchmarks for institutional comparison. It is critical to examine them within the institution as well, as the practical use of benchmarks is dependent on "the extent an institution is concerned with the

quality and effectiveness of the undergraduate education it provides" (Pascarella, Seifert & Blaich, 2010. p. 18).

Theoretical Framework

The theoretical perspective in this proposal is built on the premise that concepts of diversity are actualized when the principles of social justice, democracy, community, and caring (Dewey, 1938; Freire, 1972) become integrated into conversations on the role of higher education in society (Skillbeck, 2000). The reason is simple; a social justice perspective broadens our commitment to acknowledging that the connections between education and society are "organized unfairly" (Brookfield, 2003, p. 141). The concept of unfairness within a social justice context drives our work in "listening" to the voices of students contained in the NSSE survey. Failing to "listen" to students' voices regarding practices that have impacted their college experience denies students participation in the ways leadership operates in higher education. Self-advocacy is critical to student development and education. Fisher and Wilson (2003) discussed the importance of students as partners and examined how these partnerships can play out in practice. Boyte (2008) asserted that we must develop students' civic agency, empowering them individually and in a collective capacity "to act on common challenges across differences" (para. 6-7). Kerrigan, Gelman, and Spring (2003) noted that empowering students can transform them from passive learners to "active creators of knowledge" (p.65).

At the institution in this study, Administrators view HIPs as a critical piece of the student experience. Prior to this paper, student voices have not contributed to the conversation on these practices. Instead, this institution, like many others, has used exclusively quantitative NSSE data in the form of charts, graphs, and summary reports in discussions of the student experience. Unfortunately, these data provide only a small glimpse into that experience. In taking a social

justice framework as our lens of discovery, we are explicitly addressing how power operates within democratic systems of learning and attempting to restore some balance of power to student voices.

Methodology

Measuring academic student success, student engagement, and students' experiences outside of the college classroom have for the most part relied on "quantitative and positivistic research methods" (Kuh, 1993). Attinasi (1992) claimed that we fail to look "behind" the students' experience of attending college, preferring instead to focus on data that is quantitative. With a focus on surveying students regarding their college experiences, the NSSE is the "most widely used annual survey of undergraduates in the country" (Pascarella & Seifert, 2010. p. 3), and offers both quantitative and qualitative data to institutions, making it an ideal opportunity for critical analysis that focuses on student voice and reflects on qualitative open-ended responses in light of quantitative data.

The NSSE is focused on providing "diagnostic and actionable information related to effective educational practice" (p. 10). However, the use of NSSE data for informed decision-making or to formulate improvement strategies is not always met with universal enthusiasm. While, "many...have implemented improvements...leading to gains in student engagement" (p. 13), some institutions have merely participated, and more recently there is the growing trend of "survey fatigue" (p. 14) among students. Elsewhere, in Australia, Canada, and China, student engagement surveys modeled after NSSE have been criticized as data does not take into account "cultural and linguistic diversity" (Zepke, 2014, p. 700). Moreover, researchers focusing on student engagement have been reproached for perpetuating populist indicators as to what

qualifies as evidence of an engaged student (Zepke, 2014). Our methodology sought to close some of these gaps in NSSE analysis.

Research Questions

- To what extent and in what ways are the six High Impact Practices identified by this institution reflected in the student comments on the NSSE?
- In what ways do students voice their own engagement in High Impact Practices, and to what extent and in what ways do these student voices align with or diverge from the quantitative data?

The 2017 NSSE survey at this institution was started by 1,611 students, including 560 first-year students and 1051 senior students; of those students, 366 first-year and 510 senior students completed the full survey. The open-ended question (chosen by this institution to be included on its NSSE) asked first-year students and seniors, “What has been most satisfying about your experience so far at this institution, and what has been most disappointing?” (NSSE, 2017). The number of students who responded to the open-ended question analyzed in this paper included 260 first-year students, and 510 senior students (n=770). This study completed both quantitative analyses and an in-depth, multi-layer analysis of open-ended responses.

Analysis involved a mixed method approach utilizing computer-assisted qualitative data analysis (CAQDAS). The data were pre-screened for outliers, typing mistakes, spreadsheet cells, and other issues that could confound analysis. Additionally, a stop list was used to keep the analysis clean by eliminating foci on innocuous common words. The analysis done in this research was a two-step process using different text analyses to triangulate meaning through both language and word use. The final step in our analysis involved a manual recheck and reading of the comments.

First, a computer-based text analysis was conducted using Pennebaker's Linguistic Inquiry Word Count (LIWC) software. The LIWC can analyze whether the text includes positive or negative emotions, self-references, and causal words, among 72 other language dimensions (Tausczik & Pennebaker, 2010). Although initially designed with emotions, trauma, and recovery in mind, researchers have used LIWC to analyze social media posts, linguistics, and classical literature. In higher education, researchers have used LIWC to analyze student writings with a focus on college success, persistence, and participation (Robinson, Navea, & Ickes, 2012).

As described in Pennebaker, Booth, and Francis (2007), Pennebaker's Linguistic Inquiry Word Count (LIWC) dimensions capture essential linguistic, psychological, and social processes. The dimensions are reflected in four summary variables, which are standardized composites based on previously published research and that have been converted to percentages. These include Analytical Thinking, Clout, Authentic, and Emotional Tone (Pennebaker, J. W., Booth, R. J., & Francis, M. E. 2015). Higher percentages in "analytical thinking reflect formal, logical, and hierarchical thinking; lower numbers reflect more simple, personal, here-and-now, and narrative thinking" (p.22). A higher percentage of Clout suggests a level of knowledge and "confidence" (p. 22); a lower percentage suggests a more "tentative, humble, and even anxious style" (p.22). A higher percentage on Authentic is related with a more "honest, personal, and disclosing text, while a lower percentage suggests a more guarded and distanced form of discourse" (p.22). A higher percentage on Emotional Tone indicates a more positive, cheerful outlook, and a lower percentage displays "greater anxiety, sadness, or hostility" (p.22).

Second, Antconc was used to run a text analysis. Antconc (Anthony, 2011) is powerful freeware concordance software that extracts words from the context in which an author uses the word. It is useful for revealing patterns in large amounts of text by building a list of keywords

and frequencies (Anthony, 2005). This analysis was used to assess the frequency with which particular subjects were discussed, an assessment that also aided in further analysis. It is then possible in Antconc to isolate and investigate further by creating a color-coded list showing how the students' voices around particular themes converge or diverge. This step in the analysis was used to identify discussions around HIPs and other themes.

After completing the initial analysis with LIWC and Antconc, researchers were in disbelief at the lack of evidence for HIPs in the student comments. In an effort to crosscheck the work, a manual review of each analysis and as the full set of text comments was done, including keyword searches for both exact terms for HIPs as well as synonyms, and other language associated directly with those practices. For example, the search for evidence of undergraduate research included keyword searching for lab, laboratory, research, professor, instructor, teacher, work, project, work-study, and other terms. Each instance of associated words was carefully evaluated for any connection to the HIP being examined. This follow-up affirmed the work of the first two steps.

Results

High Impact Practices have a significant impact on engaging and retaining, “in other words... [helping to] ensure that students are getting the most out of college” (Kilgo, C., Sheets, J.K., & Pascarella, E.T., 2014. p. 511). Furthermore, institutions are encouraged to create opportunities for student participation in two or more HIPs during the college experience (Kuh, 2008). The predominant theme in the literature on college student success is that active participation in HIPs translates to positive learner outcomes (Kuh, 2008). As we begin our discussion of results it is important to note that the method used in this study examined data for

latent descriptive instances of HIPs, but the only comments included were those where there was a conspicuous mention or discernible inference to a HIP.

The results from this content analysis of open-ended responses (Table 1) show that *Study Abroad* and *Internship/Field experience* are HIPs that had a high impact on students based on the frequency, tone, and language with which students discussed them. Very few student comments directly or discernably indirectly included the other four HIPs as most or least satisfying experiences; those that show values under 1 percent in Table 1 had just three to five comments each. Two of the variables on the LIWC analysis categorize comments as positive or negative. Study Abroad was mentioned in 37 specific comments including 7 negative (lack of time, scheduling issues, and missed opportunities), and 30 positive general comments (gratitude, satisfaction). There were 23 comments related to internships; 9 of these are positive and express appreciation for having participated. Other comments on this HIP were focused on unmet expectations with regard to availability or frustrations with processes or lack of support. For example, a female student shared,

“I am currently enjoying my pre-internship and look forward to my full internship. However, I am a little disappointed because not only is my internship not paid, but I actually have to pay for it out of pocket.”

Table 1.

Percent of students who commented on the open-ended question and mentioned High Impact Practice Areas.

High Impact Practices	First-year Students	Senior Students
Learning Communities	0.00%	0.00%
Community Service/Service Learning	0.77%	0.39%
Research Project with a Faculty Member	0.00%	0.39%
Internship/Field Experience	0.00%	4.71%
Study Abroad	0.00%	7.25%
Culminating Senior Experience	0.00%	0.59%

First-year Students N = 260; Senior Students N = 510

Table 2 shows quantitative data from the NSSE survey that describe the rates at which students indicated that they had participated or planned to participate in HIPs. Comparing Table 2 with Table 1 reveals a disparity between what students said they have or will do, and what they talked about having done. This may be related to whether or not students ultimately participated (since planning to participate is included in the Table 2 rates), or whether the practices had a high enough impact to mention in response to the question. In either case, more investigation may be needed to determine what level of impact HIPs are having at this institution. These efforts cannot focus only on the quantitative or qualitative data from the NSSE, or disparities such as this one may have an undesirable impact on both analysis and practice.

Table 2.

Percent of students reporting they had participated in or planned to participate in High Impact Practice Areas.

High Impact Practices	First-year Students	Senior Students
Learning Communities (NSSE Question 11c)	14.00%	26.00%
Community Service/Service Learning (NSSE Question 12)	56.00%	63.00%
Research Project with a Faculty Member (NSSE Question 11e)	4.00%	23.00%
Internship/Field Experience (NSSE Question 11a)	8.00%	50.00%
Study Abroad (NSSE Question 11d)	4.00%	14.00%
Culminating Senior Experience (NSSE question 11f)	1.00%	42.00%

First-year Students N = 260; Senior Students N = 510

Table 3.

Demographic representation in quantitative and qualitative items on the NSSE.

Demographic Group	Percent of Responses to NSSE Quantitative Items	Percent of Responses to NSSE Open-ended Question
First-generation Students	41.9%	40.9%
Diagnosed with Disability or Impairment	13.5%	14.2%
International Students	4.1%	2.9%
Gender		
Male	39.8%	41.9%
Female	58.1%	56.4%
Another Gender Identity	0.9%	0.6%
Race		
American Indian or Alaska Native	1.6%	1.3%
Asian	4.6%	3.5%
Black or African American	10.4%	10.7%
Hispanic or Latinx	5.5%	5.7%
Native Hawaiian or Other Pacific Islander	0.7%	0.5%
White	80.0%	80.6%
Other race or Ethnicity	2.2%	1.6%

This analysis was designed to hear and give power to student voices, and in-depth coding of references to HIPs. The resulting code frequencies were analyzed alongside existing quantitative data to look for response and non-response trends from different demographic groups, with particular consideration for minoritized groups and the levels to which they have or have not shared their voices. Table 3 shows that this analysis revealed opportunities to be cautious of overvaluing voices of privilege (white students are disproportionately represented in the comments, with 80.3 percent of comments coming from them, while they make up 70.6 percent of the student body), as well as opportunities to isolate and hear voices speaking up from

the margins. Students with disabilities, Black or African American students, and Hispanic or Latinx students also represented a higher number of comments than proportion of the student population, but are still minoritized at this institution. The researchers were vigilant about seeking out these, as well as minoritized groups underrepresented in the quotes such as first-generation students to ensure their voices are heard. Please note that students frequently represent multiple intersecting identities. In this study, students are included in every group with which they identify.

As mentioned above, the open-ended question chosen by this institution for inclusion on the NSSE was, “What has been most satisfying about your experience so far at this institution, and what has been most disappointing?” A Latinx student responded,

Satisfying: Fraternity Life, Being a Teaching Assistant, Studying Abroad, the sales role plays, the national sales competition. Disappointment: The food and life in dorms my freshman year. The attitude of some lower level teachers. The millions of dollars we spend our football team so we can serve unhealthy, tasteless food in the dorms to our own students. The lack of globalization in the business college. The lack of international internship and job opportunities for domestic business students.

Using the four summary variables from LIWC, this quote is scored 98.56 percent Analytic, 87.87 percent Clout, 3.87 percent Authentic, and 49.97 percent on Emotional Tone. This student’s Analytic score indicates a formal, logical and hierarchical thinking. Their Clout score indicates that the student was speaking knowledgeably and with confidence. The score on Authentic indicates a more guarded and distanced form of discourse—this student may be holding back on some additional concerns. Finally, the Emotional Tone score indicates ambivalence. The overall analysis shows that Latinx students in this dataset tended to have lower Analytic and Clout

scores than this student, and similar Emotional Tone. This student's Authentic score is far lower than the average of other Latinx students in this dataset (mean = 42.76). Latinx students discussed internships at a higher rate than average, at 8.7 percent compared to the overall rate of 4.71 percent, and they discussed study abroad at a lower rate of 6.5 percent compared to the overall rate of 7.25 percent. Hispanic/Latinx students make up 6.42 percent of this institution's undergraduate student body, and provided 5.71 percent of the comments in this dataset.

Black students make up 12.17 percent of this institution's undergraduate student body, but only provided 10.6 percent of the comments in this dataset. A Black student shared,

Being able to travel abroad and learn about another culture within its context versus examining it outside of its context. What has been the most disappointing is the lack of participation with the arts by students on campus.

The Analytic score for this quote was 96.89, indicative of very formal, logical, and hierarchical thinking. The Clout score was 60.39 percent, fairly neutral. Both Authentic (19.27 percent) and Emotional Tone (2.51 percent) were low, indicating a guarded, distanced discourse with greater anxiety sadness or hostility. Black students discussed study abroad at a rate of 7.14 percent, which is similar to the overall rate of 7.25 percent. Five of the six students who talked about study abroad spoke positively about their experience with the program. The single negative comment was one of regret for not having participated. No Black students mentioned Internships; while this could have several explanations, it is likely a point worth exploring in future research, and by the institution.

Students with Disabilities (SWD) are minoritized within this institution, with only about 5 percent of the student body registering with the Office of Disability Services (though the

number of SWD at this institution is likely higher), but spoke up in the NSSE comments at a rate of 20.64 percent. One SWD shared,

Financial Aid has been a struggle. There is almost always an issue with my student aid every semester. The most satisfying experiences have been study abroad opportunities made available. Specific classes like <faculty name> Intercultural communications course, as well as psychological perspectives on gender and women's studies with <instructor name> have been life changing and I recommend that these courses are more emphasized to people going into any field. These two courses have had concepts and lessons that will follow me for the rest of my life.

Analysis of this comment in the LIWC resulted in an Analytic percentage of 65.44, which indicates somewhat formal, logical, and hierarchical thinking. The Clout percentage was exactly 50, so neutral. The Authentic score was 11.50 percent indicating that this student was feeling guarded and distanced when responding to the question. The Emotional Tone Score was 69.12 percent, which is somewhat positive and upbeat. Most of these scores were close to the SWD averages (Analytic = 61.42 percent; Clout = 41.14 percent; Authentic = 44.36 percent; Tone = 62.77 percent), though the Authentic score was quite low. SWD spoke about both internships (1.9 percent) and study abroad (3.14 percent) at much lower rates than average (internships = 4.71 percent; study abroad = 7.25 percent).

First-generation college students provided 63.89 percent of the comments in this dataset. These students discussed both study abroad and internships at a much lower than average rate. Their rate of study abroad comments was only 2.2 percent compared to the overall rate of 7.25 percent, and they discussed internships at a rate of 1.63 percent compared to the overall rate of

4.17 percent. The LIWC results for First-generation students showed that analysis of their comments closely reflected the average analysis on all four summary variables.

A First-generation student shared the following,

Most satisfying - opportunities to apply for internships and jobs. Most disappointing - high cost of attending institution; numerous "mystery" fees and charges with no explanation as to what they are for.

This reflects satisfaction with the internship practices at this institution, but also reflects persistent questions about fees and processes that may exist for first-generation students throughout their college experience. The LIWC analysis results for this comment were Analytic = 92.84; Clout = 50.00; Authentic = 3.37; and Emotional Tone = 84.54.

Study Significance

Undoubtedly NSSE is a useful tool (Pike, 2012). There is also much empirical evidence to suggest it is a valid and reliable tool for predicting academic success (Pascarella, Seifert & Blaich, 2010). However, NSSE is not just a tool for collecting and aggregating student success data. Its overarching aim is to act as a catalyst for "improvement in undergraduate education" (Kinzie, Cogswell & Wheatle, 2015. p. 1). The survey provides pointers and "diagnostic information about real activities that can guide interventions to promote improvement" (Kinzie, Cogswell & Wheatle, 2015. p. 1). This exploration of the open-ended survey responses from this institution's 2017 NSSE sought to amplify the often unheard voice of students in promoting those improvements and contribute to conversations on-campus and in the broader context about HIPs and student success. Institutions often have their eyes locked on benchmarking, norms, and comparisons—the goal of this research was to shift the focus to students' perspectives on their experiences, to give voice to the unheard within higher education by reforming student

perspective analysis culture so that viewing issues through a social justice lens becomes the norm.

This analysis has, as many analyses before it, led to the conclusion that more work is needed. These researchers are continuing to collaborate on this work, and it is their hope and intent to continue to expand this work in order to lend power to the voices of students and give them agency in the work of higher education.

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