Assessment UPdate
March–April 2015
Volume 27, Number 2
Progress, Trends, and Practices in Higher Education

Reflections on the State of Student Engagement Data Use and Strategies for Action

Jillian Kinzie, Cynthia A. Cogswell, Katherine I. E. Wheatle

Although the National Survey of Student Engagement (NSSE) collects responses from hundreds of participating colleges and universities every year, its ultimate goal is not to collect data but to catalyze improvement in undergraduate education. Launched in 2000 by the Pew Charitable Trusts in response to growing national and local pressures for higher education to focus on measures of education quality and for colleges and universities to engage in meaningful improvement, the NSSE has become a leader in a campaign to focus attention on a number of relatively clear characteristics of effective environments for teaching and learning. The NSSE's process indicators related to good practices in undergraduate education provide diagnostic information about concrete activities that can guide interventions to promote improvement.

By 2014, more than 1,500 institutions had participated in the NSSE, and over 4.5 million students had completed the questionnaire. In addition, the launch of two complementary instruments, the Faculty Survey of Student Engagement (FSSE) and the Beginning College Survey of Student Engagement (BCSSE), have furthered efforts to encourage the use of data for improvement by equipping institutions with information about faculty perceptions and entering students' expectations for engagement. Given these noble goals and all the student engagement data, what impact has the NSSE had on the use of data for improvement on campuses? And what lessons does this work suggest for the improvement agenda in higher education?

An Opportunity for Reflection on Data Use

The scheduled 2013 update of the NSSE instrument and measures provided an occasion to reflect on learnings after 14 years of student engagement results and undergraduate education improvement efforts. Our inquiry aimed to explore institutional use of NSSE data over the survey's history. The following questions guided our analysis: How are institutions using data? What motivated data use? What approaches are employed to make data actionable? What resulted from data use?

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Assessment Update

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March–April 2015
Volume 27, Number 2

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Assessment Update: Progress, Trends, and Practices in Higher Education (Print ISSN 1041-6099; online ISSN 1536-0725 at Wiley Online Library, wileyonlinelibrary.com) is published bimonthly by Wiley Subscription Services, Inc., A Wiley Company, at Jossey-Bass, One Montgomery St., Suite 1000, San Francisco, CA 94104-4594. Presorted Standard U.S. Postage Paid at Providence, RI. Individual subscriptions are $135 per year (institutional $257). Back issues are available in limited supply at $29 per issue. To order, phone toll-free (800) 835-6770 or email cs-journals@wiley.com. Visit our Web site at www.josseybass.com. *Postmaster:* Send address changes to Assessment Update, Jossey-Bass, One Montgomery St., Suite 1000, San Francisco, CA 94104-4594.

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From the beginning, the NSSE has invited participating colleges and universities to report on their data use. These accounts are catalogued and lessons for practitioners and the project are distilled from them. Two sources of institutional accounts, more than 120 examples published in the NSSE's Annual Results reports 2003–2013 (our analysis excluded data from the NSSE's first three administrations—2000–2003—because institutions did not have sufficient data and time to respond to their results) and 20 institutional examples elaborated in two volumes of the NSSE's *Lessons from the Field* (see nsse.iub.edu/links/lessons_home) were reviewed for this analysis.

What Do Institutional Accounts Reveal About NSSE Data Use?

Our systematic review of over 140 institutional accounts of NSSE data use yielded common themes on participating institutions' priority areas of interest and the steps taken to improve those areas. From these stories, we learned that institutions look to their data to help inform their accreditation processes; improve outcomes including retention, graduation, and student success; contextualize faculty development; launch student success initiatives; examine general education goals; establish necessary student services; and provide evidence that efforts have made a difference in the quality of the student experience. For example, University of Charleston contacts indicated that NSSE data helped that campus focus on areas in which their students were underengaged and to enhance these areas by reallocating resources. Southern Connecticut State University used results to identify predictors of student persistence and to focus attention on these student engagement practices, while Western Kentucky University referred to their data to develop their Quality Enhancement Plan, "Engaging Students for Success in a Global Society," and used NSSE results to gauge the plan's impact. At Juanita College, a committee reviewed multiple years of NSSE results to identify the relationship between study abroad and levels of engagement.

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Call for Contributions

The editor welcomes short articles and news items for *Assessment Update*. Guidelines follow for those who would like to contribute articles on outcomes assessment in higher education.

- *Content:* Please send an account of your experience with assessment in higher education. Include concrete examples of practice and results.
- *Audience: Assessment Update* readers are academic administrators, campus assessment practitioners, institutional researchers, and faculty from a variety of fields. All types of institutions are represented in the readership.
- *Style:* A report, essay, news story, or letter to the editor is welcome. Limited references can be printed; however, extensive tables cannot be included.
- *Format:* In addition to standard manuscripts, news may be contributed via letter, telephone, or fax (317) 274-4651. The standard manuscript format is a 60-space line with 25 lines per page. Articles may be sent to aupdate@iupui.edu as a Microsoft Word attachment. Please include your complete postal mailing address.
- *Length:* Articles should be four to eight typed, double-spaced pages (1,000–2,000 words). Annotations of recent publications for the Recommended Reading feature should be 200–500 words in length. Short news items and content for the Memos section should be about 50–200 words long.
- *Copyright:* Articles shall not have been registered for copyright or published elsewhere prior to publication in *Assessment Update*.
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had additional benefits as well. Students and mentors alike were engaged as investigators, and this type of sustained energy on behalf of the entire learning community will sustain the student-centered pedagogy incorporated into STEM courses long after the funding for mini-grants runs out. Both intended and unintended outcomes as a result of the CI-STEP mini-grant program were pleasant and positive surprises. ■

References

Arcario, P., Eynon, B., Klages, M., and Polnariev, B. A. 2013. "Closing the Loop: How We Better Serve Our Students Through a Comprehensive Assessment Process." *Metropolitan Universities Journal* 24 (2): 21–37.

Banta, T. W., Jones, E. A., and Black, K. E. 2009. *Designing Effective Assessment: Principles and Profiles of Good Practice*. San Francisco, CA: Jossey-Bass.

Christie, B., and Feldhaus, C. R. 2013. "Exploring Engineering and Technology Persistence and Institutional Interventions: A Review of the Literature." *Journal of Engineering Technology* 30 (2): 44–53.

Drucker, P. F. 2006. *Innovation and Entrepreneurship*. New York, NY: Harper Collins.

Gordon, L. 2010. "Partnering for Success: Using Mini-Grants to Foster Faculty/Librarian Collaborations." *College & Research Libraries News* 71 (3): 152–155.

Kotter, J. P. 2012. *Leading Change*. Boston, MA: Harvard Business Review Press.

Reynolds-Sundet, R., and Adam, A. J. 2014. "Community College Strategies: Creating Change and Buy-in for Assessment through Faculty Learning Communities." *Assessment Update* 26 (1): 10–12.

Snyder, N. T., and Duarte, D. L. 2003. *Strategic Innovation: Embedding Innovation as a Core Competency in Your Organization*. San Francisco, CA: Jossey-Bass.

Tinto, V. 2006. "Research and Practice of Student Retention: What Next?" *Journal of College Student Retention: Research, Theory & Practice* 8 (1): 1–19. Accessed February 15, 2012. doi: 10.2190/4ynu-4tmb-22dj-an4w

Veenstra, C. P., Dey, E. L., and Herrin, G. D. 2009. "A Model for Freshman Engineering Retention." *Advances in Engineering Education* 1 (3): 1G–33G.

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Reflections on the State of Student Engagement Data Use and Strategies for Action

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The motivation for data use reported most often was the campus's concern about student engagement results, usually because they were lower than expected or in comparison to peers or past results. Accreditation, predictably, was a major driver for using results. Using data for educational improvement and program evaluation and to identify and develop new priorities also motivated use. Clemson University faculty were moved to take action to address concerns about low NSSE scores in "discussions about diversity." Truman State University's faculty reviewed instructional practices and referenced NSSE results in making a case for adding more active and collaborative learning approaches, increasing service-learning, and developing department-level action plans to support change. By far the most action on NSSE data was associated with the identification of meaningful concerns that results exposed or that persuaded the campus to take action.

The approach to data use most frequently mentioned as important across all institutional accounts was sharing data across campus to enlist the involvement of campus groups, such as retention task forces, general education assessment committees, first-year experience offices, and academic departments. NSSE data were sometimes used alone but more often were paired with other information. Most campuses used student engagement results to triangulate or in combination with outcomes measures, program evaluation results, satisfaction data, or entering student surveys. Wagner College, for example, linked NSSE data with SAT scores, enrollment records, and GPAs to identify correlates of retention. Comparing results over time was also an important approach to data use. Many institutions were following trends in measures, reporting steady areas of strong performance, and noting when scores improved—particularly when this followed an intentional improvement initiative. For example, after tracking several item-level results of interest to the campus, including the number of hours students spent studying, Hope College developed and implemented strategies to address

both student-faculty interaction and study time and saw increases in these over a five-year period. In fact, using results to confirm improvements in the quality of undergraduate education was a repeated theme in institutional accounts. Coordinating other data sources with the NSSE, sharing results with campus committees, tracking scores over time, and disaggregating data to share with departments and units were among the most often employed approaches to using NSSE data.

Perhaps the ultimate gauge of successful NSSE data use is: "Did results lead to action?" Our analysis of action taken on results yielded about 40 unique types of action. Some of the action was quite specific. For example, data helped make the case for the creation of a professional position across the center for teaching and institutional research and for an additional academic advisor. Results affirmed the need for expansion of diversity experiences, and results were incorporated in applications for the Carnegie Classification on Community Engagement. Action on data also included refinement of campus practices and programs, including bolstering features in the first-year experience, encouraging the adoption of engaging pedagogies in large-enrollment courses, and identifying shortcomings in the transfer student experience. Results informed faculty development initiatives and provided occasions to bring student and academic affairs together to discuss quality in the undergraduate experience. Not surprisingly, data were also incorporated into routine processes for planning and improvement, including benchmarking, strategic planning, and program-impact assessment.

These accounts represent a range of promising uses, approaches, motivators, and actions. It is gratifying to see that institutions are focusing on student engagement in their continuous improvement plans and using NSSE as evidence of their progress. At the same time, many more institutions could and should be using their results. Institutional use accounts demonstrate the kind of action on results that the Pew Charitable Trusts and the experts that designed NSSE envisioned, yet these accounts exemplify only a fraction of NSSE participating colleges and universities.

Lessons for Encouraging More Action Using Results

Encouraging greater action on results is not without challenges. Indeed, plenty of things can get in the way of using results, including a lack of trust in the data, or a belief that results need to be explored more in depth with focus groups, or simply burying results because they don't comport with commonly held beliefs about the institution. However, NSSE data-use examples are instructive in that they point to actions taken on student engagement results. Following are seven recommendations for practice presented chronologically, from the start of an NSSE administration through the receipt of results and institutional response.

1. Enlist faculty, staff, and students in planning data use from the beginning. The best time to inspire others to use data for institutional improvement is when the campus registers to participate in the NSSE. Put the NSSE administration on the agenda of the campus assessment committee and the faculty senate, notify deans, and reach out to student organizations. The questions on the NSSE have natural points of alignment with an array of areas on campus. For example, because students report on their experiences in student life, advising, study abroad, and more, educators working in these areas should have interest in the results. To help foster interest, acquaint unit staff with the survey. Invite them to help craft recruitment messages and to identify peer institutions for comparison. Solicit their help in generating a list of what the campus can learn from the data. An added value to including constituents from the start is that they encourage students and others to invest in the survey administration and the improvement agenda.
2. Connect the NSSE to specific issues of concern on campus. Reflect first on issues that are getting institutional attention, then explore possible connections to the reason your campus is administering the NSSE, and use these connections as a springboard for action. Undeniably, when NSSE results were connected to real campus problems or were linked to topics preoccupying campus leaders, institutions reported greater action on results.
3. Create a sufficiently comprehensive plan of action that outlines what you hope to do with your data. Campuses that took significant action on results envisioned an action plan from the start and followed through with it successfully. Action plans should at least include with whom results will be shared, proposed questions and approaches for additional analyses, and a timeline for taking action. The timeline may span several months or perhaps a year.
4. Form questions about target areas of inquiry *before* you receive results. For many campuses, because NSSE participation is not new, participation seems de rigueur. Where institutions took action on results, this was not the case. Approaching NSSE administrations as an opportunity to learn something new—whether it be the second or the tenth administration—will help generate interest and action. Invite stakeholders to form questions about what they want to learn from results.
5. Examine NSSE results alongside other institutional data. Combining NSSE results with other data may illuminate an aspect of student engagement deserving deeper examination, further pinpoint an area of strength, or enhance the story being told by both data sets. Contextualize

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results by complementing them with information from internal surveys and student focus groups.

6. Take advantage of all possible motivators. Is your campus applying for a grant, or are departments preparing for program review? There are countless motivators and instances in which NSSE data serve as an institutional reflection point or assist in designing something new.
7. Identify data-use "champions." Every campus that participates in the NSSE identifies a project manager who is responsible for managing the survey process. However, this person may not be best positioned to lead data use and improvement initiatives on campus. The most successful examples of data use involved several representatives in interpreting results, sharing reports across campus, and motivating the campus to follow through on their plan to improve. These champions were aware of current campus concerns, trained in understanding results, involved in customizing the delivery of results for different audiences, and supported the creation and execution of action plans.

Conclusion

Over the past fourteen years, millions of students have reported their engagement behaviors in their responses to the NSSE, and hundreds of institutions have documented actions taken based on these results to improve the undergraduate experience. We are indebted to the institutions that have shared their inspiring examples of data use—evidence of the project's catalyzing influence in the improvement of undergraduate education. Furthermore, the lessons distilled from these accounts offer recommendations for encouraging greater action on results.

Beyond showcasing the NSSE's impact, these accounts suggest that action on data is not achieved through mandates or external demands but through intentional use of evidence by committed educators to initiate campus conversations and timely action. These institutional examples and insights also affirm a larger cultural shift in higher education toward greater acceptance of assessment as central to the practice of a learning organization, the pursuit of institutional goals, and the improvement of student outcomes.

Institutions are clearly moving beyond merely collecting data to managing and leveraging their data to realize improvement in the student experience. But we are far from done. The improvement agenda does not have an end goal. Rather, the improvement agenda is a habit, a disposition for practice, the daily work of scholars and professionals in higher education. ■

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