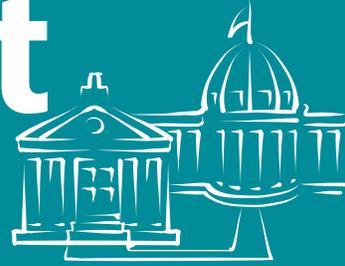


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Progress, Trends, and Practices in Higher Education

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?

CONTENTS

ARTICLES

- Reflections on the State of Student Engagement Data Use and Strategies for Action **1**
Jillian Kinzie, Cynthia A. Cogswell, Katherine I. E. Wheatle
- Using Mini-Grants to Create Sustained Faculty Buy-In for Student-Centered Pedagogy and Assessment in STEM Foundation Courses **3**
Charles R. Feldhaus, Lisa G. Bunu-Ncube, Howard R. Mzumara, Jeffery Xavier Watt, Stephen P. Hundley, Kathleen A. Marrs, Andrew D. Gavrin
- Fostering Meaningful Dialogue Can Improve Success in Learning **5**
Janet Ohlemacher
- The Participation Log: Assessing Students' Classroom Participation **6**
Tony Docan-Morgan
- Increasing Faculty Understanding of and Participation in Institution-wide Assessment for Student Learning at a Research University **8**
Shelly Stovall
- #### COLUMN
- From the States **10**
Peter T. Ewell

Assessment Update

Progress, Trends, and Practices in Higher Education

March–April 2015

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Editor

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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.

(continued on page 14)

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*.
- **Deadlines:** Each issue is typically planned four months before its publication.

Please address mailed contributions and comments to Trudy W. Banta, Editor, *Assessment Update*, Suite 140 Administration Bldg., 355 N. Lansing St., Indianapolis, IN 46202–2896. ■

Using Mini-Grants to Create Sustained Faculty Buy-In for Student-Centered Pedagogy and Assessment in STEM Foundation Courses

Charles R. Feldhaus, Lisa G. Bunu-Ncube, Howard R. Mzumara,
Jeffery Xavier Watt, Stephen P. Hundley, Kathleen A. Marrs, Andrew D. Gavrin

Introduction

RETENTION AND PERSISTENCE TO graduation are particularly challenging for students on urban campuses. Indiana University Purdue University Indianapolis (IUPUI) enrolls over 30,000 students, 21,000 of whom are undergraduates, with a diverse blend of traditional full-time, part-time, returning adult, and transfer students. Most students must work at least part-time, and many have significant family obligations. Approximately 92 percent of students commute to campus and many are first generation and

with the university and academic programs. ber of STEM majors is approximately 2,800. In 2008–2009 the School of Science had 1,108 and the School of Engineering and Technology had 1,775 declared STEM majors.

Central Indiana STEM Talent Expansion Program

The Central Indiana STEM Talent Expansion Program (CI-STEP), a five-year, \$2 million National Science Foundation-funded project (NSF DUE: 0969500) at IUPUI started in 2009. The main goals of the program are to increase the number

of students receiving degrees in STEM fields by 10 percent per year (an increase of an additional 782 STEM graduates by 2015) and to increase retention and persistence to graduation of STEM students.

1. *Student success.* Programs and initiatives that increase student engagement
2. *Career services.* Programs and initiatives dedicated to the success of students beyond the university, through services at the Career Development Center, internships, and co-ops.
3. *Articulation agreements with IVY Tech.* Partnerships with the local community college to create smooth, barrier-free pathways from the AS degree to the BS degree in STEM fields.
4. *Student-centered pedagogy.* Programs and initiatives that design, develop, and create lasting change by STEM faculty wishing to incorporate STEM pedagogy in their courses to lower DFW (grade of D or F, withdrawal) rates and increase student retention.

Student-centered pedagogy requires a commitment on the part of faculty to change curriculum, instruction, assessment, and delivery to increase student retention and lower DFW rates.



admitted conditionally. Urban universities often accept far fewer students who were in the top quintile of their high school classes.

In addition, thousands of students each year transfer from IUPUI to another university, and thousands more transfer in as upperclassmen. Predictably, the overall campus one-year retention rate among freshmen at IUPUI is much lower than that on many residential campuses.

Science, technology, engineering, and mathematics (STEM) enrollments at IUPUI are strong. In a typical year, the total num-

ber of students receiving degrees in STEM fields by 10 percent per year (an increase of an additional 782 STEM graduates by 2015) and to increase retention and persistence to graduation of STEM students.

The CI-STEP program was designed to create opportunities necessary for transforming undergraduate STEM education by propagating, expanding, and creating new research-based educational innovations and interventions. The program focuses on four types of activities:

1. *Student success.* Programs and initiatives that increase student engagement

Pedagogy Initiative Using Mini-Grants

Student-centered pedagogy requires a commitment on the part of faculty to change curriculum, instruction, assessment, and delivery to increase student retention and lower DFW rates. Investigators who worked on the CI-STEP project conducted a thorough review of the literature on organizational change and innovation (Drucker 2006; Kotter 2012; Snyder and Duarte 2003), persistence and retention in STEM (Christie and Feldhaus 2013; Tinto 2006; Veenstra, Dey, and Herrin 2009), and assessment practice and faculty buy-in

(Banta, Jones, and Black 2009; Reynolds-Sundet and Adam 2014).

As a result of the review of literature, it became clear that faculty buy-in was crucial to sustained change. The CI-STEP team realized that to create lasting change, and for faculty to embrace student-centered pedagogy, three issues must be addressed:

1. Faculty willingness to examine existing practice and pedagogy in foundation STEM courses.
2. Support and resources necessary for faculty to design and implement change in existing practice and pedagogy in foundation STEM courses.
3. Building assessment of outcomes for project activities from #1 and #2 above into all student-centered pedagogy developed by faculty.

A number of studies were identified that used mini-grants to facilitate organizational change and to sustain change in student-centered pedagogy (Arcario et al. 2013; Gordon 2010) and assessment. It became clear that to address the three key issues identified above, the CI-STEP team should use existing resources from the grant and existing best practice in organizational change, persistence and retention, and assessment to create a program that was unique, innovative, and a good fit for the urban setting in which we exist. As a result of numerous brainstorming sessions and a situational analysis, it was decided that mini-grants would be made available to faculty in the School of Science and the School of Engineering and Technology at IUPUI to address issues related to student-centered pedagogy.

A mini-grant request for proposal (RFP) was developed by CI-STEP investigators that required specific assessment data-gathering and data-analysis metrics and processes to be included in eligible proposals. The mini-grant RFP was an eight-page document that contained:

1. A brief overview of the CI-STEP initiative, including intended outcomes.
2. A section describing the purpose of the CI-STEP grant and expectations

for all mini-grant proposals. (This section clearly stated that mini-grants must promote retention, persistence, and student-centered pedagogy for STEM students.)

3. Sections on eligibility, minimum and maximum funding amounts (\$5K to \$25K), and the application/implementation timeline.
4. A section on review criteria that included a significant discussion of evaluation and assessment design and expectations.
5. A project proposal template.

The template included required sections for amount requested, project description, significance/rationale/evidence for the project, anticipated difficulties, timeline, outcomes, evaluation plan, dissemination, and budget. The evaluation section also included the following focus questions:

- What research methodology will you employ (qualitative, quantitative, mixed methods, or other)?
- How will success be measured?
- How will you know that you have achieved your outcomes?
- What kind of evidence/data will you gather and how?
- How will you analyze the evidence/data?
- How will you disseminate/report the evidence/data?

In fall 2011, four workshops were delivered, one each at the School of Science and the School of Engineering and Technology, and one each at partner schools, which included Ivy Tech Community College and Butler University. Faculty were encouraged to examine courses taught and consider whether existing DFW rates were acceptable. If DFW rates were too high and led to lack of persistence and retention in the STEM major, faculty were encouraged to consider specific changes they might incorporate in individual courses to enhance student learning and outcomes. Faculty were incentivized by being co-principal investigators on the NSF-funded CI-STEP grant and were rewarded finan-

cially as mini-grant awardees. The maximum amount of a mini-grant award was \$25,000, but if a clear rationale was provided by the principal investigator, and if the program was viable and sustainable, additional amounts could be awarded.

Mini-Grant Awards and Results

Eight mini-grants that specifically addressed DFW rates in STEM undergraduate courses were funded in early 2012, thus giving faculty planning time to implement student-centered pedagogy in classes that would be offered in August 2012. Mini-grants were awarded in content areas that included genetics, chemistry, calculus, freshman engineering, computer graphics technology, and mechanical engineering technology. Student-centered pedagogy strategies included peer mentoring in gateway courses, peer-led team learning, required recitations for large lecture sections, inductive learning methodologies, e-mentoring, and increased support for transfer students in STEM majors. Awardees were provided dollar amounts for periods of 12 to 24 months and could get extensions if necessary.

Each of the awardees developed clear, concise, and achievable project evaluations. All evaluations included problem statements, research questions, and data collection and analysis techniques. Both formative and summative evaluation models were developed by awardees, and they had to meet informally with CI-STEP investigators to share progress and discuss any barriers or challenges that needed to be overcome for success. Awardees collected quantitative and qualitative data via end-of-course outcomes (grades, DFW rates, demographic data, etc.), end-of-course student evaluations, surveys, interviews, focus groups, observations, and existing archived data. Some awardees were provided assistance in data analysis by the CI-STEP team of investigators and evaluators. A final report was prepared and uploaded to the CI-STEP website (<http://step.iupui.edu>) so that all awardees could

(continued on page 13)

Fostering Meaningful Dialogue Can Improve Success in Learning

Janet Ohlemacher

IN RECENT YEARS, POSTSECONDARY faculty have been reluctantly identifying learning outcomes, finding appropriate assessments, and collecting data to prove that their learners have been successful, without anyone necessarily knowing what results are acceptable. With pressure increasing from accreditation bodies, the freedom to remain autonomous in developing meaningful assessments will be lost unless a way is found to facilitate dialogue among stakeholders affected by these decisions.

Meaningful dialogue, especially about effective assessment, is not always a positive experience. As an administrator, I became aware of the Appreciative Inquiry methodology and have used it effectively for dialogues on budget reductions, strategic planning, and leadership development. A review of literature supports the proven success of the Appreciative Inquiry methodology as an effective tool in guiding organizational development. So could the Appreciative Inquiry 4-D process also influence the creation and evaluation of learning outcomes and a meaningful assessment of learning? As a result of trying it over a period of time, I can now respond “yes” enthusiastically!

Cooperrider, Whitney, and Stavros (2008) defined Appreciative Inquiry as:

... the cooperative co-evolutionary search for the best in people, their organizations, and the world around them. It involves the discovery of what gives “life” to a living system when it is most

effective, alive, and constructively capable in economic, ecological, and human terms (3).

What is it about the Appreciative Inquiry methodology that causes greater success in assessment of learning? The process itself has four parts: *Discovery*, where people uncover what gives life to the organization; *Dream*, where people envision what might be possible; *Design*, where people translate the ideal into action; and *Destiny*, where people actualize their plans and determine how to sustain their success.

disciplines. The conversations moved to analyzing the contributing factors that could explain these results.

A key characteristic of the Appreciative Inquiry methodology is the use of stories to begin conversations. We began our deliberations by discussing our own experiences with effective assessments. Faculty pondered their memories of which assessment in which course had helped them to experience the most success in their learning. Each person then shared his/her example. This series of conversations started our thinking about what our ideal assessments might look like.

A key characteristic of the Appreciative Inquiry methodology is the use of stories to begin conversations.



In spring 2010 I introduced the Appreciative Inquiry methodology into the comprehensive program review process at Carroll Community College. The Appreciative Inquiry model involves discovering the best and building forward based on the things organizations/people do well. We started by discovering first what things our data told us the faculty were doing well in their programs. For example, the information literacy outcomes for students in the social sciences consistently showed greater success than in other disciplines. In mathematics, the scientific/quantitative learning outcomes for students in higher-level mathematics courses were consistently higher than those outcomes in other

After establishing the successful elements within each program and sharing stories, it was time to connect this to what the faculty valued in their teaching. Using the Teaching Goals Inventory (Angelo and Cross 1993), faculty uncovered what they valued most as their primary goals within the program. Two primary goals surfaced for all the college programs: discipline-specific knowledge and higher-order thinking skills. This completed the *Discovery* phase of the process. Armed with this information, we moved on to look at what program faculty would ideally like to do in assessing their students' learning (the *Dream* phase).

(continued on page 12)

The Participation Log: Assessing Students' Classroom Participation

Tony Docan-Morgan

LIKE MANY INSTRUCTORS IN HIGHER education, I expect my students to participate actively in the classroom—namely, to contribute meaningfully to discussion questions posed to the entire class and to work through applied problems and activities in small groups. The benefits of classroom participation are clear: “students who actively participate in the learning process learn more than those who do not” (Weaver and Qi 2005, 570). Further, many college instructors perceive student classroom participation as a factor in learning (Carini, Kuh, and Klein 2006) and assign students participation grades (Bean and Peterson 1998; Rogers 2013). However, classroom participation is difficult to assess, in part because it is difficult to track in a reliable manner (Armstrong and Boud 1983; Rogers 2013). My own experiences confirm many of these findings.

During my first ten years of college teaching, I advocated that my students participate regularly in class, delineated specific expectations for classroom participation in course syllabi, and recorded the quality and quantity of students' participation after each class session. However, I came to realize the difficulty of assessing students' participation while they worked in small groups. Although I could listen in on groups' conversations, it was simply impossible to observe and assess the quality of each student's contribution to the group. Further, I began teaching larger classes, sometimes

totaling 125 students or more, making it unmanageable for me to assess each student's classroom participation. In response, I developed a “participation log,” which students use to record their participation, reflect on improving their participation, and demonstrate to me that they are participating meaningfully in class. In short, the log allows students to record, self-assess, and work toward improving their participation in class, and aids me in assessing student participation, how students are processing course material, and how I can improve my teaching.

group-mates questions, and brainstorm additional ideas. Do not shortchange discussions or activities by finishing early.

I also inform students that they will keep a log of their participation. We discuss the log's purpose for the student—to demonstrate an accurate record of the quality and quantity of participation, and to assess and work toward improving one's classroom participation. I also highlight the utility of the log from my perspective—it allows me to assess student participation and understanding of course material, as well as how I can

Reading and reflecting on students' self-assessments has also improved my skill as a facilitator of classroom discussions and activities.



On the first day of class, we discuss participation expectations outlined in the syllabus. Some of these expectations include:

- Making a substantive oral contribution during class lecture or large-class discussion at least once a week (e.g., answering questions posed by the instructor, bringing up related and relevant information, linking classroom discussions to assigned readings).
- Staying on task in dyads, small groups, and activities. When given a task or question to discuss, work to make meaningful and course content-driven contributions, ask

improve instruction. I provide students with a template of the log as a Word document and recommend that students update their logs once or twice a week (see Table 1).

I require students to submit their logs at mid-semester and at the end of the semester. Both submissions are graded. The logs are useful for gauging the quality and quantity of each student's participation and their perception of how their participation aids classroom discussions. I find that many students' self-assessments at mid-semester focus on how they need to improve (i.e., I need to participate more frequently and consistently; I should link discussion

Table 1. Log Template	
1. <i>Participation during lecture or large class discussion.</i> Note that this type of participation refers to making comments heard by the entire class. Students should log approximately 10 specific examples and ensure that they are spread out over the course of the semester.	
Date	What did you contribute to lecture or large class discussion? Report what you shared specifically and your perception of how, if at all, your contribution aided the flow of the lecture or discussion, as well as the comment's relevance to the lecture or large class discussion.
2. <i>Participation in dyads, small groups, and activities.</i> Log at least 10 specific examples and ensure that they are spread out over the course of the semester.	
Date	What did you contribute to the dyad, small group, and/or activity? Summarize how you participated, and your perception of how, if at all, your participation aided the interaction.
3. <i>Self-assessment, reflection, and improvement.</i> Log two self-assessments of your performance as a participant in the class, focusing on your strengths and how you can improve. Reflect on participation expectations outlined in the syllabus, as well as the quality and quantity of your participation in class. The first self-assessment should be completed between weeks 3 and 7, and the second should be completed between weeks 8 and 12. Each self-assessment should be at least five sentences in length.	
Date	Reflection

responses directly to class readings), and often need little elaboration from me. I provide individual, written feedback to students, which frequently corroborates their self-assessment and/or offers additional recommendations for successful participation (i.e., since your group sometimes finishes the activity and discussion early, work to ask group members to elaborate on their points; push the discussion by considering so-

lutions that have not been considered). I rarely am confronted with a “fudged” participation log, in part because I remind students that I also monitor and record their contributions.

Having reviewed hundreds of students’ participation logs for the past two years, I am more aware of their experiences as active (and sometimes inactive) classroom participants, and as a result have improved my teach-

ing practice. The mid-semester and end-of-semester logs provide useful, albeit indirect, assessment data regarding student learning. Some students, for example, articulate confusion about course concepts in their logs. I am able to revisit and clarify course material at mid-semester and revise classroom discussion questions and activities for the future. Reading and reflecting on students’ self-assessments has also improved my skill as a facilitator of classroom discussions and activities. I am more sensitive to and aware of students’ voices in my classes, and better equipped to respond to and synthesize student contributions. ■

References

- Armstrong, M., and Boud, D. 1983. “Assessing Participation in Discussion: An Assessment of the Issues.” *Studies in Higher Education* 8 (1): 33–44.
- Bean, J. C., and Peterson, D. 1998. “Grading Classroom Participation.” *New Directions for Teaching and Learning* 74 (Summer): 33–40.
- Carini, R. M., Kuh, G. D., and Klein, S. P. 2006. “Student Engagement and Student Learning: Testing the Linkages.” *Research in Higher Education* 47 (1): 1–32.
- Rogers, S. L. 2013. “Calling the Question: Do College Instructors Actually Grade Participation?” *College Teaching* 61: 11–22.
- Weaver, R. R., & Qi, J. 2005. “Classroom Organization and Participation: College Students’ Perceptions.” *The Journal of Higher Education* 76 (5): 570–601.

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Increasing Faculty Understanding of and Participation in Institution-wide Assessment for Student Learning at a Research University

Shelly Stovall

KARA POWELL OF THE FULLER Youth Institute once said, “People tend to support what they help to create.” On the campus of a comprehensive research, land-grant university of over 16,000 students, it is difficult to engage faculty across the institution in an effort to create just about anything, particularly a process for comprehensive assessment of student learning. Nonetheless, we determined to try, and we used our approach to develop faculty understanding of assessment for improved learning.

New Mexico State University–Las Cruces is a designated Hispanic-serving institution with a high percentage of first-generation students. It is our mission to serve the multicultural population of our students and our community through teaching, research, and service. We employ approximately 1,170 faculty in any given semester—including tenured, tenure- and non-tenure-track, and adjunct. Not unlike institutions across the nation, we have some faculty who hold assessment of student learning in high esteem and others who maintain a misunderstanding of assessment as an externally mandated, compliance-driven process.

As part of our self-study for the Higher Learning Commission (HLC) reaffirmation of accreditation, our faculty determined that we needed to identify, in addition to our general education learning objectives, common learning outcomes for our undergraduate students, regardless of the degree

they pursue. In this effort, our small team of faculty, staff, and administrators intentionally went to great lengths to include as many voices across the campus as possible, and specifically those of faculty.

Over the course of the 2008–2009 academic year, I went to multiple venues across the campus—forty-seven departmental faculty, student, and staff meetings. I limited my time in these meetings to twenty to thirty minutes, depending on the desires of those hosting the meetings. At each meeting I posed two questions: the first had to do with outcomes of the first year, and the second with outcomes at the baccalaureate level, “What should *any* student who graduates from our institution with a bachelor’s degree, regardless of their degree or major, be able to do, know, and/or value?” I then simply recorded all responses on a whiteboard, chalkboard, or flip chart. I answered any questions presented, but more importantly I listened to concerns, complaints, even “attacks” without trying to defend assessment, my position, or what we were trying to do. I diligently adhered to my allotted time and always expressed appreciation for their time (which I knew was very precious) and input. I took pictures of the responses they had given me or took the flip chart pages with me. I indicated that e-mails or phone calls with further thoughts or comments were welcome. As a follow-up, I e-mailed the department chair or appropriate person for the staff and student meetings with my

appreciation, and asked them to forward the e-mail to the faculty/staff/students with whom I had met, again indicating I would be happy to meet with individuals or receive additional comments, questions, or suggestions as desired.

By the end of the spring semester our team had a comprehensive list of desired outcomes identified by faculty, staff, and students. We put responses into a spreadsheet and then began to sort them according to same and similar outcomes. Eleven clearly rose to the top of the list. Through discussion, review, and further revision over time, we combined and separated various outcomes, but ultimately settled on eleven. From this list, the team crafted a draft mission, goals, and objectives for our undergraduate students. Thus, the first step, identifying desired learning outcomes, was accomplished.

The second phase of development occurred through our institution’s participation in the HLC Assessment Academy. Although we were awarded reaccreditation with no required follow-up or monitoring, we believed participation in the Academy would support efforts and encourage ongoing commitment by upper-level administration in these efforts.

A new team was formed, again representing faculty, staff, and administrators, to participate in the Academy beginning fall 2009. It was at our initial round-table forum that we launched a discussion about whether or not our students understood

what a baccalaureate degree represents. Between our significant first-generation degree-seeking student population and our state's lottery scholarship (any student with a 2.5 or above qualifies to receive full tuition at any public institution in the state), it appears many of our students do not have a clear sense of purpose when they enter the university community. We reasoned that our university did not likely provide that information in a clear and systematic way. Thus, the concept of a rubric to define for students what a university education at NMSU represents was conceived.

As we further developed this idea, we determined that the rubric should provide a clear pathway for students and communicate shared responsibility for learning—both inside and outside the classroom. It should also define levels of achievement and give descriptors of what both achieve-

ment and progress on the outcomes “looks like.” Over the course of the following year, the “The Vision for the Baccalaureate Experience” (BE) rubric was created. By fall 2010 we began to seek feedback on the draft rubric from our various assessment committees on campus (representing faculty, staff, and administrators), as well as from individuals within the campus community. Thus began an intensive and iterative cycle of revision and review, and our second phase—articulating what the desired learning “looks like”—neared completion.

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that as we moved to assessing each unique learning outcome, we would develop specific rubrics that incorporated the spirit of the BE rubric, while further defining the particular outcome of interest. At the same time we were finalizing the rubric, we began structuring an assessment of one of the learning objectives: critical thinking. We implemented a pilot study in spring 2011, and by fall 2011 had to admit our pilot was a bust. Although faculty who participated in the pilot submitted student assignments that specifically targeted critical thinking, there were so many variables in the assignments and in the instructions given to students about completing the assignments that we found ourselves unable to apply our rubric to the student work consistently.

Knowing we could not control for specific assignments or for the instructions

given to students, we decided to shift our focus and consider a learning objective that would be a little easier to address. After much debate, we selected self-awareness.

Over the course of the fall, we developed a second pilot project and implemented it in spring 2012. For this assessment we incorporated both direct and indirect measures. Indirect measures included students' self-assessing their levels of self-awareness, and direct measures included observations of student interactions for evidence of self-awareness. This assessment went much better, and the results were telling: although our students self-reported high levels of self-awareness, they did not provide convincing evidence of self-awareness as we defined it.

Going back to our grassroots approach and desire to engage the campus community, we hosted an open forum to share the

assessment process and results, and develop consensus on what the results meant and how we should respond. Unfortunately, our open forum was not well attended. However, we did get a wonderful suggestion from one participant: take the results back to the departmental faculty meetings.

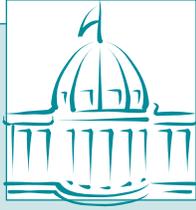
With this, we also began to rethink our ultimate goals for this particular assessment. Instead of trying to respond to the specific results, we strategized about how to use the departmental meetings as opportunities to (1) increase faculty knowledge about assessment and assessment practices, and (2) build confidence that our institution could effectively use evidence of student learning to direct institutional conversations and ultimately decision making to support student learning. With this assessment we could demonstrate that assessing learning at the institutional level *could* be done, and we could use this venue to propose an institutional focus on a long-enduring concern about student writing. We could achieve consensus and buy-in, and therefore commitment to decision making supported by findings of a focus on student writing.

We spent the rest of the spring semester taking the results of our assessment of self-awareness to departmental faculty meetings across our campus. Again limiting our time to twenty to thirty minutes, we shared our process, actual student responses from the assessment, our results, and even some further data gathered from employers at career fairs on our campus. We ended each session by proposing a focus on student writing. As in our first round of faculty meetings, reactions were mixed. Some faculty railed against our methods, some had questions about the Baccalaureate Experience objectives, and some wanted to know how “their” students performed. But when approached with the proposition to focus on student writing, the response was overwhelmingly positive. Though some continued to be skeptical about whether substantial changes would be realized, most were at least cautiously optimistic about the possibilities. In

(continued on page 12)

Through this process we have taken significant steps toward understanding that we, as a campus community, have shared, common interests and responsibility for learning that transcends traditional silos of disciplinary expertise.





From the States

What Happens When Quality Assurance Crosses Borders?

Peter T. Ewell

When it was published about ten years ago, Tom Friedman's *The World Is Flat* forced us to recognize growing global interdependence in manufacturing, finance, communications, and many other walks of life. Higher education, of course, has not been immune to these trends. Many US institutions operate overseas and carry their quality imprimatur, conveyed by regional accreditation, with them when they do so. Indeed, site visits to these institutions are among the most prized assignments among peer reviewers. At the same time, institutions based in other countries are

increasingly seeking accreditation by US accreditors. Middle States, for example, has accredited institutions in South America, Taiwan, the United Kingdom, and several other countries. Other regionals are committed to doing so as well and have a number of offshore institutions in the accreditation pipeline. But exporting US accreditation has largely been one-way, and the countries in which these institutions are located have their own national quality assurance (QA) agencies. How do these agencies interact with US accreditors to ensure that standards are aligned and that institutions and the public do not receive mixed signals about quality?

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ity? A recent study sought answers to these questions on a limited basis. What it found raises important questions about how flat things really are, at least in the realm of higher education quality assurance. The study's principal author is Ralph Wolff, past president of the Western Association of Schools and Colleges (WASC) Senior College Commission, who undertook it in cooperation with Laureate International Universities and with me at the National Center for Higher Education Management Systems (NCHEMS). Laureate's interest in this topic is un-

derstandable because its various units operate extensively overseas; indeed, it sees this research effort as the first step in a larger worldwide study of quality assurance procedures. The current study's focus is so-called international branch campuses (IBCs), which are defined as postsecondary educational providers located in countries other than that in which they are headquartered. The study reviewed the QA practices of agencies in eight jurisdictions: Dubai, Hong Kong, Singapore, Malaysia, England, and Australia, as well as two regional accrediting organizations in the United States—the New England Association of Schools and Colleges (NEASC) and the WASC Senior College and University Commission (WSCUC). These agencies represent both “sending” organizations—those that review and monitor the quality of an institution that has one or more IBCs located outside the home jurisdiction of the institution—and “receiving” organizations—those that have processes to review IBCs offering programs within their own jurisdiction whose home institutions are located in other jurisdictions. Agencies reviewing sending institutions must first decide whether it is part of their responsibility to review or actually visit IBCs elsewhere, or whether simply to include them under the umbrella of their overall approval of the institution. In parallel, agencies in jurisdictions that have IBCs offered by institutions located elsewhere must decide whether to accept the quality determination of the sending QA agency or undertake their own independent reviews. Somewhat surprisingly, the study found significant variations in policy across QA agencies in both categories.

Among sending QA agencies, for example, the two US accreditors require institutions to obtain prior approval from them before opening an IBC, while one of the non-US agencies (Singapore) has such a requirement and the other three do not. Similarly, the two US accreditors visit the overseas location within the first year of provision, while non-US QA agencies normally visit an overseas site only if it is part of a more comprehensive country visit involving

multiple providers in that country. All reviews, when they occur, involve a focus on learning outcomes; if a degree qualifications framework is in place in the jurisdiction, linkages to it are also required. US accreditors charge additional fees to support such overseas site visits, while QA agencies in England and Australia undertake such reviews at government expense. One of the most interesting findings for sending QA agencies, however, is the fact that none has a regular process for informing receiving QA agencies when they are engaged in reviewing an IBC in their jurisdiction.

US accreditors are not among receiving QA agencies because overseas institutions normally do not have IBCs in the United States, and if they did, approval to operate them would be from state authorization offices and not accreditors. All of the other receiving QA agencies, however, require prior approval of IBCs in some form that frequently involves extensive registration procedures and follow-up monitoring. In some cases, the accredited status of the sending institution may allow IBCs to avoid or mitigate these procedures. All four of the non-US QA agencies also have “revalidation” procedures for IBCs that usually involve a site visit and require IBCs to submit an annual report. Once again, all reviews involve a focus on learning outcomes and outcomes assessment procedures. Most strikingly, however, none of the receiving QA agencies directly communicate or liaise with the home-jurisdiction sending QA agency when reviewing IBCs.

Looking at the eight QA agencies in both their sending and receiving roles for IBCs, the overall conclusions of the study are that (1) there is little procedural consistency in how quality is assured, and (2) communi-

cation and collaboration between the pairs of QA agencies associated with a given IBC is quite limited. In all cases, the receiving QA agency relies on the validation of quality provided by accreditation or recognition of the home institutional provider without much additional verification. It is es-

Inconsistencies in language and review procedures among the seven US regional accrediting associations are becoming increasingly difficult to sustain.



entially assumed that the IBC will be operated at the same level of quality as the home institution and that this level will be reviewed directly by the sending QA agency in some form. Only the US accreditors actually do this, however. Looking at this situation, the authors of the study conclude that it would be beneficial to develop greater consistency and communication among QA agencies worldwide because of the growing prevalence of cross-border instructional provision. This might include developing formal memoranda of understanding (MOUs) among QA agencies and installing regularly used channels of communication for them to exchange information about institutions and their overseas operations.

Readers of this column may be forgiven for wondering what any of these arcane international developments have to do with quality assurance in the United States. There are two parallel situations here that I believe bear watching. First, growing student mobility and heightened political scrutiny mean that inconsistencies in language and review procedures among the seven US regional accrediting associations are becoming increasingly difficult to sustain. This will undoubtedly be a

major topic of discussion surrounding the upcoming reauthorization of the Higher Education Opportunity Act. Second, questions of jurisdictional authority are also front and center in discussions of state authorization of instructional provision across state boundaries. Like

accreditation standards and review processes, state authorization processes have always been a hidden thicket of inconsistency. But this is now out in the open and the State Authorization Reciprocity Agreement (SARA) initiative of the Western Interstate Commission on Higher Education (WICHE) is slowly but surely developing badly needed alignment across state recognition processes. In short, students in all jurisdictions are crossing borders in search of postsecondary opportunities with far greater frequency than ever before. In doing so, they expose significant flaws in higher education QA processes that can no longer go unattended. We owe these students a lot of thanks for this inadvertent service. ■

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Increasing Faculty Understanding of and Participation in Institution-wide Assessment

(continued from page 9)

short, what faculty witnessed through our time together was that we could not only facilitate campus-wide assessment of student learning, but could develop campus-wide conversations about learning on broad, institutional learning outcomes that transcend discipline-specific outcomes. This provided at least a willingness to “entertain the idea” that something productive and positive could come out of institution-wide assessment.

How did this process, extended over multiple years, facilitate faculty development in assessment? As we went through the steps in developing, implementing, and understanding results, we took a grassroots approach to engage faculty broadly in each step. First, we took faculty through a process of identifying desired learning for students. Second, we used the areas identified for student learning and transformed them into statements for student learning—learning that is shared across disciplines. Third, we defined levels of learning, developed a tool to communicate desired learning to students, and shared the tool across the

campus community—we created a common language and common expectations for desired student learning, what we now call our “Vision for the Baccalaureate Experience.” Next, we piloted an assessment and failed; then we tried again, including going into classrooms across campus to implement the assessment. By communicating our own initial failure, we gave permission to fail. This was huge to communicate to faculty as we met with them in departmental meetings. As we shared our process, we also discussed aspects of direct and indirect assessment, a distinction some faculty find difficult to make. Finally, we engaged in conversations about student learning as we shared findings and asked for input and interpretation—in this case, we did not end up with a plan of action, but we laid the groundwork for taking action based on our next assessment for student learning. Perhaps most importantly, we demonstrated that faculty were the drivers of institutional assessment, and that meaningful assessment can be done with minimal faculty time and effort.

Lessons learned? Two were primary for me. First, through this process it became unquestionably apparent that even faculty groups or individuals with the greatest angst toward assessment (or what they perceive assessment to be) are invested in and even animated about student learning. Second, letting faculty know that our first pilot was an utter disaster was tremendous in opening the doors for understanding the process. The “permission to fail” immediately broke down barriers about assessment and between myself (perceived as “the expert”) and those who struggle with just the idea of “assessment.” Suddenly, assessment was “human” and not perfect.

Most valuable takeaway? Through this process we have taken significant steps toward understanding that we, as a campus community, have shared common interests and responsibility for learning that transcends traditional silos of disciplinary expertise. Even at a research university, it is possible to engage faculty across disciplines to investigate student learning on broad institutional objectives for the purposes of improving that learning. ■

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Fostering Meaningful Dialogue Can Improve Success in Learning

(continued from page 5)

In the *Design* phase, the dialogue turned to how faculty would assess primary learning goals. We discussed what ideal assessments might look like. It was a rich conversation, utilizing the outcomes data faculty had been collecting over several years. In some cases, they affirmed the use of a particular test, exam question, or learning activity. In other cases, they discarded assessments that weren’t effective and decided to design new ones to improve results.

The last phase of the process, *Destiny*, required faculty to do some long-range

planning, spread out over five years. Here, not only did they discuss how to reconstruct their assessments, but they also examined their learning outcomes and discussed which ones truly represented the strengths of their program and which ones needed revision or elimination. In addition, the planning also included looking at effectiveness measures such as completion rates, enrollments, and other pertinent data and determining action steps needed over the next five years.

The process took place over at least three meetings, usually lasting two hours

each, spread over at least three months. In each meeting, we reviewed the progress that had been made in the previous one and completed the next steps.

At the conclusion of the process, Appreciative Inquiry methodology resulted in an integrated vision of what faculty want their students to accomplish within a program/discipline. As program/department faculty talked through achieving learning goals, they realized how individual courses within the college needed to flow together to ensure that students have the opportunity to achieve these outcomes. The conversations have also helped faculty see the critical role assessment plays in the framework of learning.

Next year, the five programs that started the process will be repeating their

comprehensive reviews. As I have talked with chairs and faculty of all programs in the ensuing years, it has been exciting to see the conversations change. More and more, people are asking for data to help support the decisions they made in their first planning sessions. In some cases, such as transitional studies, they took as much as a year to redesign the entire program and are experiencing student success increases of 10 to 20 percent.

It has not been unusual to have program chairs and faculty who had not started the process ask to begin earlier than scheduled because they heard about the success other programs had been experiencing. For example, the humanities department asked to conduct focus groups a year early to help determine the impact of learning

on students' personal development. They conducted a pre- and postsurvey with randomly sampled sections of all courses and asked if students believed the course content would help them in their future careers. The data analysis showed a 45 percent improvement in this rating when the second survey was conducted. The faculty began to identify strengths in their assignments, lectures, and the like that could foster career growth within their students. They were then able to add items to their action plans to continue their success.

The only piece of the process that I could not easily accomplish was the inclusion of student perspectives in the dialogue. Being a community college, it is a challenge to find students who are consistently with us for two years. The

time considerations often affect a student's ability to participate. We continue to look for ways to include students in the dialogue, however, and would appreciate any thoughts about how to enlarge the conversation to include them. ■

Reference

- Angelo, T. A., and Cross, K. P. 1993. *Classroom assessment techniques: A handbook for college teachers*, 2nd ed. San Francisco: Jossey-Bass.
- Cooperrider, D. L., Whitney, D., and Stavros, J. M. 2008. *Appreciative Inquiry Handbook: For Leaders of Change*, 2nd ed. Oakland, CA: Berrett-Koehler.

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Using Mini-Grants to Create Sustained Faculty Buy-In for Student-Centered Pedagogy

(continued from page 4)

have access in addition to investigators. Finally, all mini-grant recipients presented results at a poster session of the CI-STEP Advisory Committee Meeting in July 2014.

Of the eight mini-grants awarded, seven have reported quantitative data that demonstrate improvement in student performance and persistence. DFW rates have dropped, final exam averages have increased, and attendance has increased at newly formed STEM resource centers. As importantly, it is clear that mentoring initiatives including peer-led team learning and attendance at both lectures and peer mentoring in gateway courses are having a very positive impact on both students and mentors. Qualitative data in the form of observations, focus groups, and interviews show that mentoring initiatives make a difference in perceptions of students and mentors toward efficacy in STEM core concepts and toward ability to complete a STEM degree. In one large-scale mentoring program an unexpected result was that student mentors (upperclassmen and

graduate students) reported an interest in STEM teaching as a result of their mentoring experience.

Mini-grant awardees have pledged to continue the student-centered pedagogies and assessments they developed with the CI-STEP grant resources. Observing student improvement and assessments that produced clear results and the necessary findings to make data-driven decisions, mini-grant awardees expressed willingness to change existing practice and pedagogy and use built-in formative and summative assessment.

Discussion, Recommendations, and Conclusions

While more data must be collected for the CI-STEP project, it is apparent that a culture shift in how to teach STEM to undergraduates is taking place on the IUPUI campus. Data support the fact that the mini-grant program did indeed address the issues of sustained change, faculty buy-in, support for change, and using assessment to make data-driven decisions

surrounding student-centered pedagogy. Our findings support previous research in these areas, and the fact that the CI-STEP program continues to gather data and meet original goals and objectives is further testimony to the value of mini-grants to jump-start sustained faculty change.

The key elements of the CI-STEP project that led to success included the process of developing and awarding the mini-grants. The review of literature was critical to the development of the mini-grant RFP. The preliminary meetings with interested faculty were crucial in helping faculty determine whether this program was right for them. More importantly, the built-in assessment and evaluation was essential to ensuring high-quality data-gathering and analysis that supported findings of the individual mini-grants. Finally, the cumulative results provided for a robust summative evaluation of the mini-grant program. The embedded element of coaching and mentoring provided to awardees on behalf of the CI-STEP investigators made for an interdisciplinary connection centered on assessment that was of benefit to all involved.

Not only were the quantitative outcomes reached in that DFW rates were decreased, but it was clear that the mini-grant program

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

(continued from page 2)

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 add-

ing 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 demon-

strate 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

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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