Using NSSE to Assess Educational Effectiveness and Improve Quality

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Do you have NSSE data?

- 1,300 Baccalaureate granting institutions have NSSE data!
- Several hundred schools in HLC-NCA
  - Indiana = 30 institutions; Illinois = 44; Ohio = 46; Kansas = 14; Michigan = 28; Wisconsin = 30 etc.
- Who has your NSSE data?
- Are you using NSSE results in your PEAQ and AQIP process?

The NSSE Challenge

What might we more effectively use data about quality in undergraduate education to:
- provide evidence of student learning
- motivate and inspire effective educational practice
- strengthen the learning environment?

What Really Matters: Student Engagement

Because individual effort and involvement are the critical determinants of impact, institutions should focus on the ways they can shape their academic, interpersonal, and extracurricular offerings to encourage student engagement.

Pascarella & Terenzini, How College Affects Students, 2005, p. 602

Good Practices in Undergraduate Education
(Chickering & Gamson, 1987; Pascarella & Terenzini, 2005)

- Student-faculty contact
- Active learning
- Prompt feedback
- Time on task
- High expectations
- Respect for diverse learning styles
- Cooperation among students

National Survey of Student Engagement
(pronounced "nessie")

Community College Survey of Student Engagement
(pronounced "sessie")

College student surveys that assess the extent to which students engage in educational practices associated with high levels of learning and development
NSSE Review:

- NSSE is administered annually (spring) to first-year & senior students at participating colleges and universities.
- Results provide an estimate of how undergraduates spend their time and what they gain from attending college; the extent to which they perceive their institutions support their academic and personal development.
- NSSE items represent empirically confirmed ‘good practices’; they reflect behaviors associated with desired outcomes of college.
- The time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development.
- Data belong to the institution.

NSSE Suite of Instruments

- National Survey of Student Engagement (NSSE)
- Faculty Survey of Student Engagement (FSSE)
- Beginning College Survey of Student Engagement (BCSSE)

NSSE Items

- Quality of effort and time spent studying
- Involvement in active and collaborative learning
- Experiences with higher order thinking, reflective learning and integrative learning
- Quality of interactions with peers and faculty in and outside classroom
- Perceptions of environment for learning (support for academic work, emphasis on attending speakers, diversity experiences)

In your experience at your institution during the current school year, about how often have you done each of the following?

- a. Asked questions in class or contributed to class discussions
- b. Made a class presentation
- c. Prepared two or more drafts of a paper or assignment before turning it in

To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

- a. Acquiring a broad general education
- b. Acquiring job or work-related knowledge and skills
- c. Writing clearly and effectively
NSSE Benchmarks of Effective Educational Practice

- Level of Academic Challenge
- Active & Collaborative Learning
- Student Faculty Interaction
- Enriching Educational Experiences
- Supportive Campus Environment

NSSE Results

- Are diagnostic: to help institutions look holistically at undergraduate experience
- Help pinpoint aspects not in line with mission, or what institution expects
- Identify weaknesses and strengths in educational program
- Help institutions know what to focus on to improve student learning and success

Using NSSE: What Kinds of Questions can be answered?

- **Thermometer** Questions
  
  How many students/faculty...?

- **“How Do We Compare” Questions**
  
  Do we score above or below institutions like us?

- **“Looking Within - Comparing Groups” Questions**
  
  Do X and Y do certain things differently?

- **“Multiple Data Source” Questions**
  
  Can we corroborate with other data...?

Thermometer Question Example: To what extent are our FY students experiencing active learning?

- What percent of our First-Year students report that they frequently (often + very often) ask questions in class?
  
  a). 25%  b). 36%  c). 52%  d). 68%
  
  (compared to 70% at Bac LACs)

- Plus, only 42% of our First-Year students report that they frequently work with peers on projects in class...

- Should this be higher given our institutional size, and expressed commitment to active learning in the first year experience?

Thermometer Question Example: Are students & faculty experiencing our service-learning mission?

- What percent of FY students report they “never” did service-learning?
  
  a). 25% (b). 38%  c). 45%  d). 50%

- Faculty Survey of Student Engagement (FSSE) results show 65% faculty teaching FY think "community service" is “important” and 42% do this in their FY courses.

- Data provide evidence of service-learning mission, but should all students do this their first year? Are all faculty doing this?

Comparison question: How do our students’ experiences compare?

<table>
<thead>
<tr>
<th>Benchmark Comparison: Supportive Campus Environment (SCE)</th>
<th>NSSEville State</th>
<th>Carnegie Peers</th>
<th>NSSE 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Mean</td>
<td>59.7</td>
<td>59.4</td>
<td>59.1</td>
</tr>
<tr>
<td>Senior Mean</td>
<td>55.8</td>
<td>56.6</td>
<td>56.6</td>
</tr>
</tbody>
</table>

NSSEville State compared with Carnegie Peers.
Looking within to compare majors: Collaborative Learning - Seniors by Major

![Collaborative Learning - Seniors by Major](image)

Linking other data: Predicting Retention at Elon University

- Students’ relationship with peers predictive of retention. Elon considering programs/services to foster these relationships, checking published findings & best practice.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer</td>
<td>0.34</td>
<td>0.02</td>
</tr>
<tr>
<td>First-year</td>
<td>0.27</td>
<td>0.05</td>
</tr>
<tr>
<td>Retention</td>
<td>0.45</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Student Engagement Results as Evidence & To Guide Improvement

- **NSSE/CCSSE as evidence**
  - Provides student learning process and outcomes indicators
  - Benchmarking
  - Participation in survey demonstrates ongoing evaluation, institutional improvement, and effectiveness activities

- **NSSE/CCSSE in quality improvement efforts**
  - Catalyst for institutional action
  - Guide for improvement plan
  - Baseline and outcomes measures to assess improvement

Rationale for Using NSSE in Accreditation

- **Accrediting agencies are primary external group with which schools share results.**

Rationale for Using NSSE in Accreditation - 1

- Student engagement results are a direct indicator of what students put into their education, and because the survey measures participation in various types of effective educational practices it provides an indirect measure of student gains

- NSSE results indicate areas for improvement and are “actionable” - thus, appropriate for inclusion in quality improvement plans

Rationale for Using NSSE in Accreditation - 2

- Enables institutions to benchmark against similar and aspirational peer comparison groups
- Results reveal widely held assumptions about students and how they use institutional resources to enhance learning
- Results are accessible and understandable by various internal and external stakeholders
NSSE Accreditation Tool-kit

1. Background information on using student engagement in accreditation
2. Customized to each of the six regional accrediting bodies
3. Complete map of NSSE items to accreditation standards
4. Vignettes from other institutions on using NSSE in accreditation

DOWNLOAD Toolkit: www.nsse.iub.edu
Click on: “Reports & Services”

NSSE Items Mapped to HLC - NCA Criteria

2005 NSSE Questions | HLC | AQI P 2008 | AQI P 2000
--- | --- | --- | ---
8b. How would you rate the quality of your relationships with faculty members? | 3c | 1R5, 1R6, 3R1, 3R2, 3R3, 3R6, 4R1-4R4 | 1R3, 1R4, 3R1, 3R5, 4R3, 4R4
10b. To what extent does your institution emphasize providing support you need to help you succeed academically? | 2b, 3d, 4d | 1R5, 1R6, 3R1, 3R2, 3R3, 3R6, 4R1-4R4, 6R1, 6R2, 6R3, 6R5 | 1R3, 1R4, 3R1, 3R5, 4R3, 4R4, 6R1, 6R3
11e. To what extent has your experience at this institution contributed to your skills at thinking critically and analytically? | 3c, 4b | 1R1, 1R2, 1R3, 1R6 | 1R1, 1R4
12. Overall, how would you rate the quality of academic advising you have received at your institution? | 3d, 5d | 1R5, 1R6, 3R1, 3R2, 3R3, 3R6, 4R1-4R4, 6R1, 6R2, 6R3, 6R5 | 1R3, 1R4, 3R1, 3R5, 4R3, 4R4, 6R1, 6R3

Using NSSE for Accreditation: Institutional Examples

HLC-NCA
- Augustana College
  - Self-study included NSSE results to support goals to increase participation in senior culmination experience and service learning, and to improve campus diversity.
- St. Cloud University
  - Used NSSE results and other data to address HLC Standards Criterion 2, preparing for the future, and Criterion 3, evidence of an effective teaching and learning environment.

North Central Association
- Lawrence Technological University
  - Improvement plan included NSSE results which indicated a need to more closely study the types and amounts of required writing
- University of Missouri-St. Louis
  - Self-study included 2000 – 2004 NSSE results to support evidence of compliance with life-long learning

EXAMPLE: Southern Illinois University Edwardsville
NSSE data support Action Projects:
- New Student Transition Action Project
  - Included a New Freshmen Seminar requirement
    - NSSE data used to measure response differences between students who had taken pilot version and those who had not
    - NSSE data measure effectiveness of newly developed seminars
SIUE Action Project=>New Freshman Seminar

- Common Goals:
  1. Assist new freshman in making the transition to college level work and expectations;
  2. Orient students to the services and culture of the University;
  3. Engage students in an intellectual community of students and faculty.

- Piloted four options:
  - Honors Seminars
  - University Experience Course
  - Culture, Ideas, Values Course (CIV)
  - Learning Communities in Academic Development

SIUE Oversampled First-Year class to study the Freshman Seminar pilot

Of the items that showed significance at the 0.1 level, 4 either directly or indirectly related to the objectives of the freshman seminar course as outlined in the proposal. Including the following questions:

1 A--Asked questions class or contributed to class discussion.
10 F--Attending campus events and activities (special speakers, cultural performances, etc.)
11 K--Understanding yourself
13--How would you evaluate your entire educational experience at this institution?

(Summary Report—NSSE 2003 Special Course Oversample April 19, 2004)

SIUE - New Student Seminar Task Force Report and Recommendations (June, 2004)

- Recommendation 1: Adopt a freshman seminar requirement
- Recommendation 2: Include a freshman seminar in general education reform.
- Recommendation 3: Create committee for implementation and management.

University of Indianapolis

- Two major NSSE data points in AQIP portfolio: mean scores for individual items and benchmark scores
- Used selected 2004 and 2005 NSSE items to complete the following portfolio questions:
  - ‘1R3: Helping Students Learn,’
  - ‘1R4: Comparison with Results of Other Higher Education Institutions,’
  - ‘1I2: Setting Targets for Improvement,’
  - ‘3R1: Student Satisfaction Results,’
  - ‘3R2: Student Relationship Building Results,’
  - ‘6R1: Results for Student Support Service Processes,’
  - ‘6R2: Results for Administrative Support Service Processes,’
  - ‘7C1, 7C2: Collection, Storage, and Tracking of Institutional Measures.’

University of Indianapolis

- Used NSSE results to complete Portfolio Questions
- Systems Appraisal concern about importance of appropriate mix of assessment data—NSSE data could not stand alone as a direct measure of student learning
- Learned valuable lesson through Portfolio process on how to report NSSE results

NSSE - Continuous Improvement and AQIP

- Student engagement as measured by NSSE can be incorporated into Action Project - AQIP Criterion
- NSSE results reflect areas of strength and need for improvement
- Data can be used to improve policies, programs, and procedures
NSSE and Accreditation

Final Thoughts

1. Results are one direct indicator of what students put into their education and an indirect indicator of what they get out
2. Items can be used to appraise effectiveness of mission fulfillment
3. Data are actionable & easily understood by internal and external constituents
4. NSSE is most meaningful when coupled with other forms of data
5. Use FSSE to identify areas of strength and to stimulate discussions related to improving teaching and learning

Discussion and Comments

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