We all want the same thing—an undergraduate experience that results in high levels of learning and personal development for all students.

Overview

- The context for assessment and accountability
- How and why engagement matters to student success
- Using student engagement data

Accountability 2009

- Greater emphasis on assessing student learning outcomes and providing evidence that student performance is acceptable
- Demands for comparative measures
- Assessment "technology" has made great strides, but still is inadequate to document learning outcomes most institutions claim
- Increased calls for transparency—public disclosure of student and institutional performance

Two Paradigms of Assessment

<table>
<thead>
<tr>
<th>Strategic dimensions</th>
<th>Continuous improvement</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Formative (improvement)</td>
<td>Summative (judgment)</td>
</tr>
<tr>
<td>Stance</td>
<td>Internal</td>
<td>External</td>
</tr>
<tr>
<td>Predominant ethos</td>
<td>Engagement</td>
<td>Compliance</td>
</tr>
<tr>
<td>Implementation</td>
<td>Multiple/Prevalence</td>
<td>Standardized</td>
</tr>
<tr>
<td>Nature of evidence</td>
<td>Quantitative/Qualitative</td>
<td>Standardized</td>
</tr>
<tr>
<td>Reference points</td>
<td>Overtime, comparative,</td>
<td>Comparative or fixed</td>
</tr>
<tr>
<td></td>
<td>established goal</td>
<td>standard</td>
</tr>
<tr>
<td>Communication of results</td>
<td>Multiple internal</td>
<td>Public communication,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>media</td>
</tr>
<tr>
<td>Use of results</td>
<td>Multiple feedback loops</td>
<td>Reporting</td>
</tr>
</tbody>
</table>

Purposes of Assessment

- Evidence ↔ Demonstrate value and return on investment for accountability purposes
- Improvement ↔ Determine what is working and what is not to improve programs, courses, institutional outcomes.
- Transparency ↔ Provide information about educational effectiveness and what students know and can do.
- Feedback ↔ Enable students to see their progress and learn how to improve.
What's Happening in the USA

Over past 5 years institutions report...

- More assessment activities; greater attention to accreditation requirements
- Emphasis on clearer statements of student learning outcomes, but little student understanding of outcomes
- More emphasis on engaged learning practices including learning communities, service-learning courses, internships, senior capstones, and undergraduate research
- Little transparency, even less documented improvement


First Things First

We value what we measure, so wise decisions are needed about what to measure in the context of campus mission, values, and desired outcomes.

Focus on mission-relevant, educationally meaningful indicators linked to student success that the institution can do something about

Indicators of Success

- achievement
- persistence
- degree/certificate completion
- satisfaction
- course retention
- success in subsequent courses
- graduate school
- employment
- capacity for lifelong learning

Evidence of College Graduates Skills/Knowledge

<table>
<thead>
<tr>
<th></th>
<th>Very effective</th>
<th>Fairly effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervised internship/community-based project</td>
<td></td>
<td>83%</td>
</tr>
<tr>
<td>Senior project (e.g., thesis, project)</td>
<td></td>
<td>79%</td>
</tr>
<tr>
<td>Essay tests</td>
<td></td>
<td>63%</td>
</tr>
<tr>
<td>Electronic portfolio &amp; faculty assessments</td>
<td></td>
<td>55%</td>
</tr>
<tr>
<td>Multiple-choice tests</td>
<td></td>
<td>32%</td>
</tr>
</tbody>
</table>


What Really Matters in University: 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, 2005, p. 802

Foundations of Student Engagement

Time on task (Tyler, 1930s)
Quality of effort (Pace, 1960-70s)
Student involvement (Astin, 1964)
Social, academic integration (Tinto, 1987, 1993)
Good practices in undergraduate education (Chickering & Gamson, 1987)
College impact (Pascarella, 1995)
Student engagement (Kuh, 1991, 2005)
Student Engagement Propositions

- What students do -- time and energy devoted to educationally purposeful activities
- What institutions do -- using effective educational practices to induce students to do the right things
- Educationally effective institutions channel student energy toward the right activities

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

- Student-staff 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 “cessie”)

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

Student Engagement Initiatives

- 2,500,000+ students from 1,400 different schools in USA
- 80+% of 4-yr U.S. undergrad FTE
- 50 states, Puerto Rico
- 64 Canadian IHEs
- South African Survey of Student Engagement (SASSE)
- Australasian Survey of Student Engagement (AUSSE)

AUSSE
Australasian Survey of Student Engagement (AUSSE) is administered by ACER. It is intended to yield generalisable information about university education sensitive to institutional diversity that will allow institutions to monitor and enhance the quality of education.
**NSSE & Aussie Questionnaires**

- Student Behaviors
- Institutional Actions & Requirements
- Reactions to College
- Student Background Information
- Student Learning & Development

**Effective Educational Practices**

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

**NSSE Scalars and Modules**

- Course Challenge
- Writing
- Higher-Order Thinking Skills
- Integrative Learning
- Active Learning
- Deep Learning
- Collaborative Learning
- Course Interaction
- Out-of-Class Interaction
- Information Technology
- Diversity Experience
- Support for Student Success
- Interpersonal Environment

**Validity of Self-Reported Data**

- Self-reported data are valid if five conditions are met:
  - Information is known to respondents
  - Questions are clear and unambiguous
  - Questions refer to recent activities
  - Respondents think the questions merit a serious and thoughtful response
  - The questions do not threaten or embarrass students, violate their privacy, or encourage them to respond in socially-desirable ways

- NSSE and AUSSE were designed to satisfy these conditions

**Does AUSSE yield valid information?**

- Survey questions...
  - Are clearly worded
  - Are well-defined
  - Have high content and construct validity
  - Relationships exist between items that are consistent with objective measures and other research
  - Responses are normally distributed
  - Patterns of responses are consistent both within and across major fields and institutions

**Validation of NSSE Benchmarks**

Net of student background characteristics, pre-college measures of the outcomes, type of institution attended, and other college experiences, one or more of the NSSE measures of good practices in undergraduate education consistently predicted development during the first college year on multiple objective measures of student development, including effective reasoning and problem solving, well-being, inclination to inquire and lifelong learning, intercultural effectiveness, leadership, moral character, and integration of learning (Pascarella, Seifert & Blaich, 2009)
**Grades, persistence, student satisfaction, other desired outcomes, and engagement go hand in hand**

**Student engagement varies more within than between institutions.**

**Level of Academic Challenge:**
Later Years at Large Universities

**Student-Staff Interaction:**
First-Year Students at Small Universities

**Worth Pondering**
How do we reach our least engaged students?

**Variation With-in**
Allocation of benchmark score variation

Quality is not uniform within institutions. The lion's share of the variation is among students, within institutions.
1. Focus on an important issue
- Persistence
- Under-engaged students
- Fragmented curriculum
- Tired pedagogical practices
- Poor first-year experience
- Low academic challenge
- Real world applications
- Capstone experiences

2. Examine the results from multiple perspectives
- Confirm/corroborate findings
- Link results to other information about the student experience

Sample Data Sources
- Locally-developed measures
  - National Student Engagement (NSSE)
  - Beginning College Survey of Student Engagement (BCSSE)
  - Faculty Survey of Student Engagement (FSSE)
  - Cooperative Institutional Research Program (CIRP)
  - Your First College Year (YFCY)
  - College Student Experiences Questionnaire (CSEQ)
  - West_Quest_Student Satisfaction Inventory
  - ETS MAP and Major Field Tests
  - ACT College Assessment of Academic Proficiency
  - Collegiate Learning Assessment (CSLEA)
- Institutional data - GPA, financial aid, transcripts, retention, certification tests, alumni surveys, satisfaction surveys...
- Electronic portfolios

Possibilities
- Merge AUSSE data with school records
- Identify engagement patterns by student characteristics
- Predict retention, degree attainment, grades, other outcomes
- Track student engagement year to year
- Compare w/ peer, aspirational groups
- Program evaluation
- Accreditation
- Consortium data sharing
- Student outcomes research
- Public reporting (USA TODAY)
- National reporting template?!
Benchmarking Approaches

- **Normative** - compares your students to students at other colleges and universities.
- **Criterion** - compares your school's performance against a predetermined value or level appropriate for your students, institutional mission, size, curricular offerings, funding, etc.

3. Align initiatives with:

- Institutional mission, values, and culture
- Student preparation, ability, interests
- Resources and reward systems
- Existing complementary efforts
  - Strategic priorities
  - Curriculum reforms
  - Internationalization and diversity
  - External reviews

4. Cultivate grass roots buy-in

- Leaders endorse, but don't dictate
- Structures not (nearly) as important as relationships

"It's not really all that important that we understand each other... just that you understand me."

Cultivate grass roots buy-in

- Make sure faculty and staff understand the concept of student engagement
- Drive data down to dept level
- Gain consensus on student engagement priorities
- **Faculty/Staff Survey of Student Engagement**
Faculty/Staff Survey of Student Engagement

FSSE and SSSE measure faculty expectations and activities related to student engagement in effective educational practices.

Course Emphasis

| FACULTY report very much or quite a bit of emphasis on memorizing |
|---------------------------------|------------------|
| Lower Division                  | Upper Division   |
| 30% / 23%                       |                  |

<table>
<thead>
<tr>
<th>STUDENTS report very much or quite a bit of emphasis on memorizing</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th yr. Students Seniors</td>
</tr>
<tr>
<td>67% / 60%</td>
</tr>
</tbody>
</table>

Prompt Feedback

<table>
<thead>
<tr>
<th>FACULTY gave prompt feedback often or very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Division Upper Division</td>
</tr>
<tr>
<td>88% / 90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STUDENTS received prompt feedback often or very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st yr. Students Seniors</td>
</tr>
<tr>
<td>53% / 63%</td>
</tr>
</tbody>
</table>

5. Annually report progress

- Senior leadership is key
- Some individual or group (high profile 'think force') must coordinate, monitor and report the status of initiatives
- Determine appropriate ways to measure, report, and use student success indicators for accountability and improvement (e.g., common template)
- Leave no number unexplained

NSSE & AUSSE Virtues

- Research based
- Focus on educationally purposeful activities
- Results point to areas where improvement is desirable
- Compelling face validity
- Established psychometrics
- Transparent operations
- Third party administration

NSSE & AUSSE Virtues

- Random sampling
- Targeted sampling
- Flexibility: consortium question, modules
- Contributes to value-added estimates when linked to outcomes measures
- Benchmarks for peer, national, international and other groups
Cautions
- Only one source of information
- Corroborate results
- Engagement skeptics
- Not an outcomes measure
- Denial in face of less-than-desirable results
- Eschew rankings

What's Next for Student Learning Outcomes Assessment?
- Multiple measures
- Diagnostic, milestone, and culminating assessments all necessary
- Wide range of assessment practices – basic to more complex assessments of learning environment, student work, direct learning outcomes, “value-added”

AAC&U VALUE Rubrics
- Inquiry and analysis
- Critical thinking
- Creative thinking
- Written communication
- Oral communication
- Quantitative literacy
- Information literacy
- Teamwork
- Problem solving
- Civic knowledge and engagement
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning
- Integrative learning

AAC&U VALUE project – 12 Rubrics

What's Next for Student Learning Outcomes Assessment?
- Multiple measures
- Diagnostic, milestone, and culminating assessments all necessary
- Wide range of assessment practices – basic to more complex assessments of learning environment, student work, direct learning outcomes, “value-added”
- Measure university-level learning by different programs and levels
- Demonstrate action on assessment results
- Improve quality – document change, actual improvements in student learning
- Resolve tension between assessment for improvement and accountability
Two Paradigms of Assessment

<table>
<thead>
<tr>
<th>Strategic dimensions</th>
<th>Continuous</th>
<th>Improvement</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Formative (improvement)</td>
<td>Summative (judgment)</td>
<td></td>
</tr>
<tr>
<td>Stance</td>
<td>Internal</td>
<td>External</td>
<td></td>
</tr>
<tr>
<td>Predominant ethos</td>
<td>Engagement</td>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>Multiple/Integration</td>
<td>Standardized</td>
<td></td>
</tr>
<tr>
<td>Nature of evidence</td>
<td>Quantitative and qualitative</td>
<td>Quantitative</td>
<td></td>
</tr>
<tr>
<td>Reference points</td>
<td>Over time, comparative, establish a goal</td>
<td>Comparative or fixed standard</td>
<td></td>
</tr>
<tr>
<td>Communication of results</td>
<td>Multiple internal channels</td>
<td>Public communication, media</td>
<td></td>
</tr>
<tr>
<td>Use of results</td>
<td>Multiple feedback loops</td>
<td>Recording</td>
<td></td>
</tr>
</tbody>
</table>

National Institute for Learning Outcomes Assessment
Making Learning Outcomes Usable & Transparent

- Documenting what students learn and can do is of growing interest both on campus and with its multiple constituencies
- Knowing far too little about what actually happens in assessment on campuses around the country
- NILOA is conducting surveys and other activities to help fill that void
- NILOA's mission is to identify best practices in assessment that institutions find useful

www.learningoutcomesassessment.org

Questions & Discussion

- How can we use student engagement data to enhance student learning and success?
- What do we need now and in the future to productively use student engagement and related information?

Ponder This