

Assessing What Really Matters for Student Learning
Making Productive Use of Your Engagement Data


Robert M. Gonyea
Associate Director
Center for Postsecondary Research
Indiana University

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“We can tell people almost anything about education except how well students are learning.”

Patrick M. Callan, President,
National Center for Public Policy and Higher Education



Overview



1. NSSE Foundations
2. Measuring engagement
3. Research
4. Institutional examples
5. Tips for campus leaders, faculty, and student affairs

Foundations of NSSE



NSSE History



Founded with a grant from Pew Charitable Trusts to *“change the national discussion about collegiate quality”*

Proposed as an alternative to traditional rankings (e.g., US News and World Report)




Foundational Work

- Quality of effort (Pace)
- Student involvement (Astin)
- Social and academic integration (Tinto)
- Good practices in undergraduate education (Chickering & Gamson)
- Learning and development model (Pascarella)

All learning and development requires an investment of time and effort by the student.

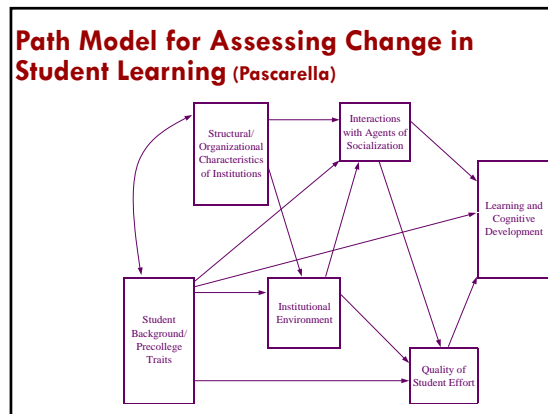
C. Robert Pace (1984).
Measuring the quality of college student experiences.



Principles of Good Practice in Undergraduate Education

- Student-faculty contact
- Active learning
- Prompt feedback
- Time on task
- High expectations
- Experiences with diversity
- Cooperation among students

(Chickering & Gamson, 1987)

How COLLEGE AFFECTS STUDENTS

Ernest T. Pascarella
Patrick T. Terenzini

"Because individual effort and involvement are the critical determinants of college 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




NSSE's Key Aims

- To enrich the discourse about college quality
 - ▣ Shift the focus to teaching & learning
 - ▣ Proven effective educational practices
- To provide diagnostic information to support the improvement of undergraduate education
 - ▣ Actionable information
 - ▣ Meaningful comparisons

Student engagement:

A domain of constructs that measures both the time and energy students devote to educationally purposeful activities, and how students perceive different facets of the institutional environment that facilitate and support their learning.

Kuh, G. D. (2001). Assessing what really matters to student learning. Change.



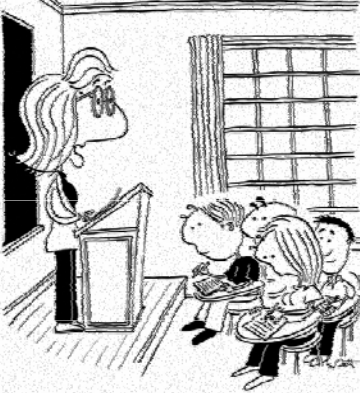
What is Student Engagement?

- 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

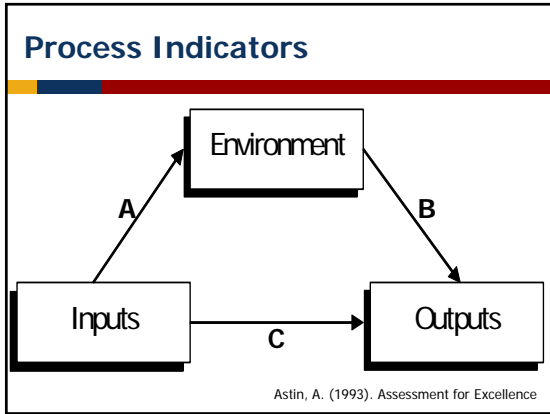
Process Indicators

Examples:

- ▣ The amount courses emphasize *higher-order thinking* activities.
- ▣ The number of hours students spend in *academic preparation*
- ▣ The amount and quality of *writing* students are asked to submit




“When writing your essays, I encourage you to think for yourselves while you express what I’d most agree with.”



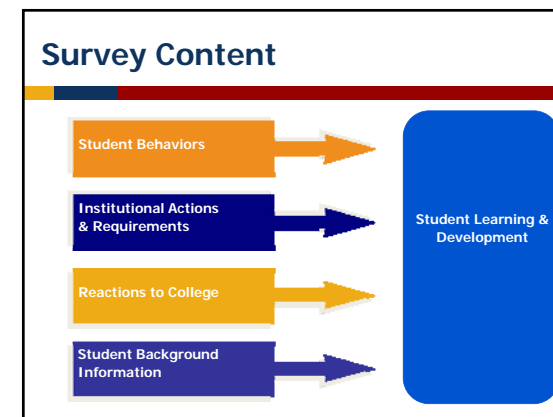
Measuring Student Engagement

Informing the campus dialogue



Survey Relevance and Utility

- Designed by experts
- Questions are easy for students to understand and complete
- Data have diagnostic value
- Best practices in survey research
- Findings from NSSE (as well as other surveys) are most informative when combined with other sources of information about students and their experiences.



Self-Reported Data

Valid if five conditions are met:

1. Information is known to respondents
2. Questions are phrased clearly & unambiguously
3. Questions refer to recent activities
4. Respondents think the questions merit a serious and thoughtful response
5. Answering the questions does not threaten or embarrass students, violate their privacy, or encourage them to respond in socially-desirable ways

Benchmarks

Effective Educational Practices

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

High-Impact Practices

- First-year seminars
- Common intellectual experiences,
- Learning communities
- Service learning
- Undergraduate research
- Study abroad and other experiences with diversity
- Internships
- Capstone courses and project

Deep Approaches to Learning

- D.A.L. Overall scale (combination of 3 sub-scales)
- Sub-Scales
 - ▣ Higher-order learning
 - ▣ Integrative learning
 - ▣ Reflective learning

Deep Approaches to Learning

- HIGHER-ORDER LEARNING
 - ▣ Analyzing the basic elements of an idea, experience, or theory
 - ▣ Synthesizing & organizing ideas, info., or experiences
 - ▣ Making judgments about the value of information
 - ▣ Applying theories to practical problems or in new situations

Deep Approaches to Learning

- INTEGRATIVE LEARNING
 - ▣ Integrating ideas or information from various sources
 - ▣ Included diverse perspectives in class discussions/writing
 - ▣ Put together ideas from different courses
 - ▣ Discussed ideas with faculty members outside of class
 - ▣ Discussed ideas with others outside of class

Deep Approaches to Learning

- REFLECTIVE LEARNING
 - ▣ Examined the strengths and weaknesses of your own views
 - ▣ Tried to better understand someone else's views
 - ▣ Learned something that changed how you understand an issue

Gains in Learning and Development

- Practical Competencies
- Personal & Social Development
- General Education Learning




Student Engagement Research



Research


- Predicting important educational outcomes
- Connecting the dots
- Are institutions improving?



Predicting Important Educational Outcomes

Study on the effectiveness of the NSSE benchmarks


Pascarella, Seifert, & Blaich
(*Change*, Jan/Feb, 2010)



Predicting Educational Outcomes

Wabash National Study of Liberal Arts Education

- First-year students
- Longitudinal pre-test/post-test design
- 19 institutions from 11 states



Predicting Educational Outcomes

Wabash National Study of Liberal Arts Education

Seven Liberal Arts Outcomes

- Effective Reasoning & Problem Solving
- Moral Character
- Inclination to Inquire & Lifelong Learning (2)
- Intercultural Effectiveness (2)
- Personal Well-Being

Predicting Educational Outcomes

Wabash National Study of Liberal Arts Education

Findings

- NSSE benchmarks had a significant positive association with difference scores for the seven outcomes
- Active & Collaborative Learning associated with intercultural effectiveness
- Yes, though Student-Faculty Interaction consistently positive, it was not significantly associated

Predicting Educational Outcomes

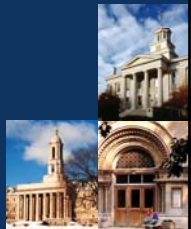
Wabash National Study of Liberal Arts Education

“NSSE results are good proxy measures for growth in important educational outcomes such as critical thinking, moral reasoning, intercultural effectiveness, personal well-being, and a positive orientation toward literacy activities.”

Connecting the Dots

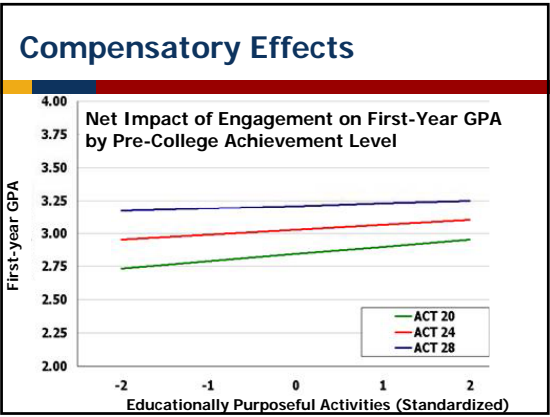
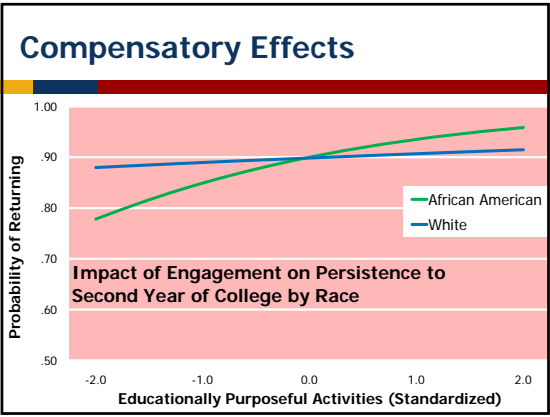
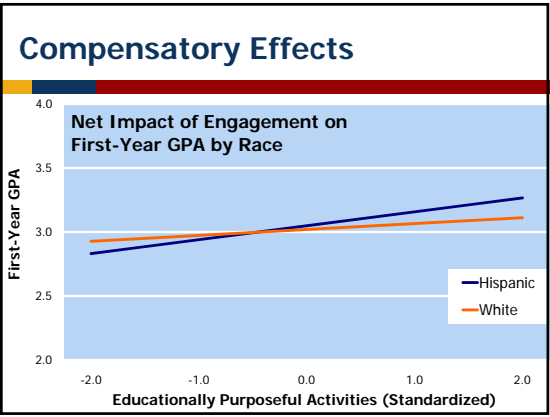
Relationships between engagement, grades, and persistence

Kuh, Kinzie, Cruce, Shoup, & Gonyea (2005)



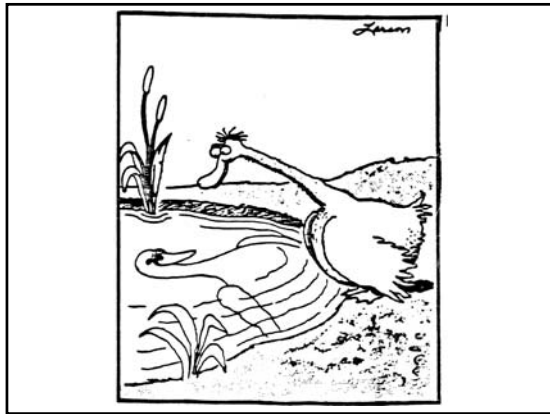
"Connecting the Dots" Study

- Relationship between engagement, grades and persistence
 - ▣ Significantly positive effects, net of pre-college achievement, financial aid, SES, and many other student characteristics
 - ▣ Engagement has **compensatory effects** on grades and persistence – i.e., salutary effects are even greater for lower ability students and students of color.



Are Institutions Improving?





Impetus for Study

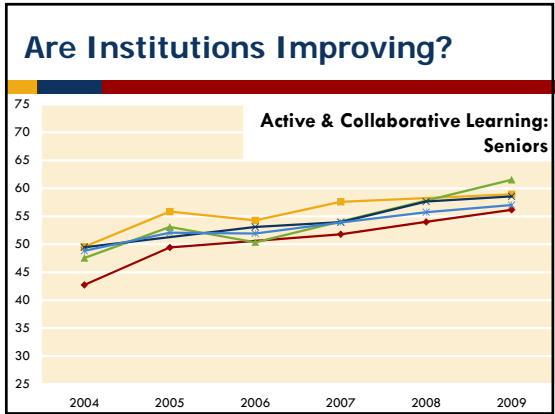
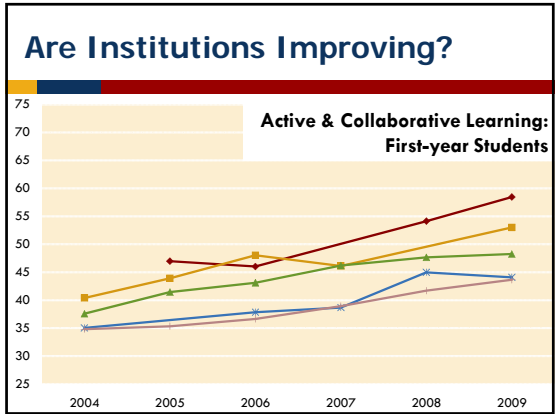
- Opportunity: 10th NSSE administration
- Institutions with multiple years of NSSE make it possible to assess change (or stability) in engagement over time.

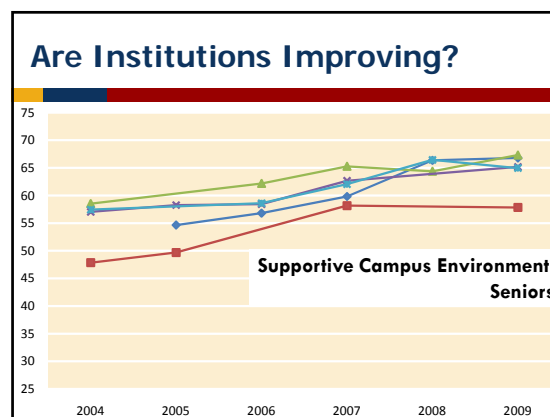
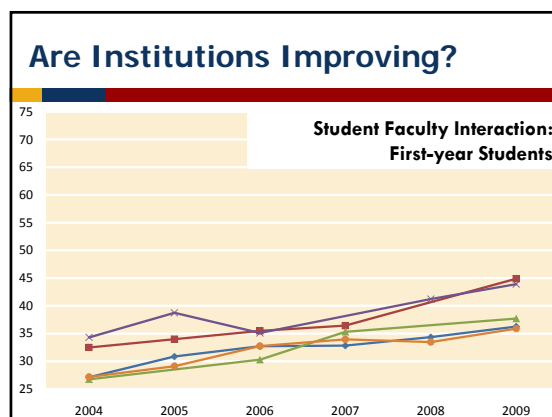
Are Institutions Improving?

- Comparing results over time
 - ▣ Four NSSE administrations, 2004-2009
 - ▣ Examined Benchmarks and High-Impact Practices
 - ▣ As indicated by effect size and linearity of trend

Are Institutions Improving?

- Evidence of improvement found at 41% of institutions on at least one measure;
 - ▣ These institutions represented all types and sizes
 - ▣ Examples of downward trends were rare





Are Institutions Improving?

Yes.

Systematic improvement efforts have paid off.

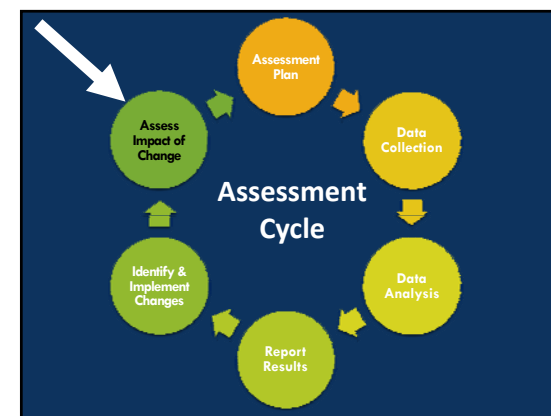
Are Institutions Improving?

To Ponder:

- ▣ What catalyzed the improvement efforts?
- ▣ What activities led to improved engagement?
- ▣ What was the role of faculty and administrative leadership?
- ▣ What lessons can be drawn to inform such efforts on other campuses?

Putting Student Engagement Data to Use

Converting Results into Action



Youngstown State Univ (OH)

Integrating NSSE Results with Other Institutional Data

- Examines NSSE data in relation to direct measures of learning and progress – *within subpopulations*
- Compares NSSE to internal survey data on general education and diversity

Pace University (NY)

Using NSSE data for improvement throughout the entire university

- Emphasized goal of “student-centeredness”
- Used NSSE items in program assessments (service learning, capstone courses, study abroad)
- Improving the sophomore experience

Pace University (NY)

Using NSSE data for improvement throughout the entire university

- Examined engagement by school/college, including professional accreditation
- Assigned full-time faculty to teach Univ 101 course, and advise the same students
- “One-stop” initiative for student services

Viterbo University (WI)

Effectively Communicating Results Internally and Externally

- Benchmarks against peer institutions
- Disseminates item results related to active and collaborative learning for faculty, and the campus environment for administrators.
- Assesses diversity learning
- Faculty increased active learning strategies

Wittenberg University (OH)

Appointed a Presidential Task Force on engagement in both academic and co-curricular environments


- Encouraged faculty investment by stressing that engagement is rooted in academics
- Identified functional areas that helped promote student success

SUNY Brockport

Shared results widely

- Disseminated selected NSSE results and summaries to academic departments, EOP program, Honors program, and general education.
- Used FSSE and discussed mismatches in faculty and student perceptions with deans and faculty

What can campus leaders, faculty, and student affairs do to promote student learning and success?



What Campus Leaders Can Do

1. Student success is everybody's business
2. Scale up programs and practices that work
3. Cultivate an ethic of continuous improvement
4. Put someone in charge
5. Stay the course

What Faculty Members Can Do

1. Embrace undergraduates and their learning
2. Maintain high expectations and communicate them clearly
3. Use engaging pedagogical approaches
4. Provide prompt and meaningful feedback to students
5. Weave diversity into the curriculum
6. Make time for students

What Student Affairs Can Do

1. Focus on the educational mission
2. Cultivate partnerships for learning
3. Hold students to high expectations for engagement and learning
4. Have safety nets & early warnings
5. Support programs with evidence of producing student learning and success
6. Create spaces for learning

Thank You

Bob Gonyea
 Indiana University Center for Postsecondary Research
www.nsse.iub.edu
nsse@indiana.edu

