

Liberal Learning for Global Citizens

Assessing Student Learning Outcomes
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Purposes of Assessment

- (Economic) To show that students, their families, and taxpayers (in the case of public institutions) are getting a reasonable return on their investment tuition and tax dollars
- (Accreditation) To demonstrate that an institution actually does what it claims to do
- (Institutional) For ongoing improvement that arises from a “culture of assessment”

Assessment – Then and Now

- In the past, assessment consisted primarily of students earning grades and completing a specified list of courses and number of credits. It was assumed that the student who completed all requirements had received a quality education.
- Since the mid-1980s, institutions have been called on increasingly to produce various forms of evidence – over and beyond degree requirements -- to show they are providing a quality education.

Approaches to Assessment

Resources and Reputation Model: “Quality” based on:

- Amount of endowment and Alumni giving
- External grant funding
- Library holdings
- Faculty preparation
- Attributes of the entering class (high school GPAs, standardized test scores)

Problem: Research has shown little correlation with these factors and the quality of undergraduate experience

Actuarial Indicators

“Quality” based on

- Number of students enrolled
- Number of graduates
- Retention rates
- Graduation rates

These measures are among the most commonly used assessment standards. These data do not reveal much about the quality of undergraduate experience.

Student Surveys

These instruments provide student feedback about their educational experience.

Example: Student Satisfaction Inventory (SSI). FSU has administered this survey since the mid-1990s. This survey covers all aspects of the university.

“Satisfaction” is defined in terms of the extent to which the university has met their expectations.

Students rank the importance of various areas of their experience and evaluate the extent to which the university meets their expectations in each area.

Results of the SSI have guided improvement efforts.

National Survey of Student Engagement

“NSSE” asks students to evaluate their university experience in five general areas:

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

National Survey of Student Engagement

Based on the principle: “The research is unequivocal: students who are actively involved in both academic and out-of-class activities gain more from the college experience than those who are not so involved.”

Pascarella & Terenzini. (1991). How college affects students

National Survey of Student Engagement

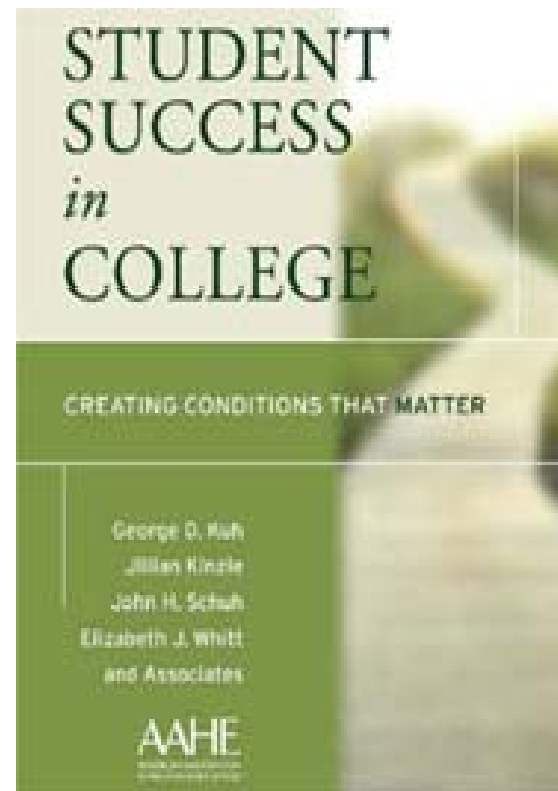
Sample Questions

- Asked questions in class
- Made class presentation
- Worked with other students on project
- Received prompt feedback
- Discussed ideas with others outside of class
- Met faculty outside of class

Time spent in: class preparation, reading, visits to art gallery, attendance at plays, recitals, internships, community service, tutoring, independent study, learning communities, study abroad.

National Survey of Student Engagement

Our students' responses on the NSSE in 2001, coupled with our graduations rates that are higher than to be expected, earned FSU its ranking in top twenty schools for creating conditions that promote student learning.



We will conduct NSSE in Spring 2006

Student Surveys

Strengths:

- Provides student feedback on factors important to them (SSI) and important conditions that have been empirically linked to increased student learning (NSSE).
- Results offer information that cannot be revealed by tests alone and can be used to guide instructional improvement.

Limitations:

- Information is self-reported.
- Provides indirect evidence of student learning

Direct Measures of Student Learning

Standardized Test: Rising Junior Exam – CBASE

- Addresses skills and knowledge that students normally develop in the first two years. Covers reading, writing, critical thinking, natural sciences, and social sciences.
- In use at FSU since early 1990s. Reviewed by faculty initially and on several subsequent occasions.
- Even though results have been reported each year, we have never used the data in any significant way to improve instruction.
- Are we assessing students or are we assessing the university?

Collegiate Learning Assessment (CLA)

- National longitudinal study (funded by Lumina Foundation) designed to measure “value added.”
- Attempt to measure the impact that our instruction has on students in critical thinking, analytical reasoning, written communication.
- Random sample of 300 freshmen completed exam this semester. 100 of these will be retested when they are seniors. The difference in scores of freshmen and seniors is a measure of “value added.”
- We will also test 100 seniors in spring 2006. Gain base-line data on seniors for subsequent testing. Comparison of seniors now and in three years will show impact of our curricula revisions.

CLA - Description

- Analytic Reasoning Task
 - Make an argument
 - Break an argument
 - *Scored by ETS e-rater*
- Critical Thinking Task
 - *Scored by staff of trained readers*

CLA – “Make an Argument”

- “In our time, specialists of all kinds are highly overrated. We need more generalists – people who can provide broad perspectives.”
- Directions: 45 minutes, agree or disagree and explain the reasons for your position.

CLA – “Break an Argument”

30 minutes, discuss how well-reasoned you find the following argument: “Butter has now been replaced by margarine in Happy Pancake House (HPH) restaurants throughout the southwestern US. Only about 2 percent of the customers have complained, indicating that 98 people out of 100 are happy with the change. Furthermore, many servers have reported that a number of customers who still ask for butter do not complain when they are given margarine instead. Clearly, either these customers cannot distinguish margarine from butter, or they use the term “butter” to refer to butter or margarine. Thus, to avoid the expense of purchasing butter, the HPH should extend this cost saving change to its restaurants in the southeast and northeast as well.”

CLA – Critical Thinking Tasks

- **Features:**
 - Open-Ended
 - Document-Based
 - Real-Life Scenarios
- **Components**
 - Workspace
 - Document Library
- **Emphasis on application and integration of knowledge and skills to practical situation.**

Standardized Tests

- Strengths

- Demonstrate what students know and are able to do
- Can be used for comparisons both within the institution and other institutions.

- Limitations

- May seem to be “add-on” to the regular curriculum required by administrators or external agencies. Hence, little buy-in by faculty and students.
- How do we persuade students to take the exam?
- If they sit for the exam, how can we ensure that they will give their best efforts?

Embedded Assessment

Liberal Learning Symposium
Fayetteville State University
Fall 2006

Assessment: Embedded

- Definition: Assessment tools embedded into courses and assignments
- Examples
 - Rubrics
 - Standardized assignments
 - Portfolios

Assessment: Embedded

- Advantages

- Clearly related to courses and assignments
- Necessarily used in course/assignment design
- Not an additional burden on the student

- Drawbacks

- More work to compile, evaluate (portfolio)
- Less standardized (beyond institution)
- Less easily compared

Examples

- NC State University
- Indiana University/Purdue University
Indianapolis (IUPUI)
- Oral Roberts University

NCSU Embedded Assessment

- **Structure**

- Council on Undergraduate Education
- Office of Undergraduate Assessment

- **Process**

- Replace rationale w objectives (learning outcomes)
- Review gen ed courses and assignments for alignment w objectives
- Revise courses to reflect objectives

IUPUI

- Principles of Undergraduate Learning (PULs)—adopted 1998
- Learning matrix and rubrics—developing
- Student eportfolios—pilot 2002

Oral Roberts ePortfolio: Origins

- 2002: Assessment Implementation Plan
 - Defined learning outcomes throughout the curriculum
 - Rubrics for every outcome
 - Eportfolio for all students
- 2003: Partnership with Chalk & Wire
 - eportfolio: web-based document mgmt
 - RubricMarker: software to electronically record portfolio assessments

ORU Launch

- 2003-04: selected professional programs
- 2004-05: All freshmen required to develop an eportfolio
 - Graduation requirement
 - Gen Ed 099: required non-credit class in using eportfolio technology

ORU Curriculum

- General Education Outcomes
- Course Inventory
- Standardized Assignments
 - Common rubrics aligned with Outcomes

ORU Eportfolio Development

- Students must submit standardized set of work (“artifacts”)
 - General Education Handbook with guidelines
 - Electronic or scannable artifacts
- Instructor assesses each artifact using rubric
 - Assessment recorded online
- Students may revise or replace

ORU Eportfolio Assessment

- Instructor assesses artifacts created in her/his class
- Student must compile artifacts that embody all learning outcomes
- Advisor audits eportfolio for completeness and proficiency
- University uses assessment data to improve institutional effectiveness

Our Task:

- Select a learning outcome identified in the morning session and complete the following:
 - Delineate the evaluative criteria for determining whether students have achieved the outcome.
 - Give examples of test questions that would require students to demonstrate that they have achieved the outcome.
 - Identify products of learning that would require students to demonstrate that they have achieved the outcome.