Getting Started: Determining Appropriate Assessment Goals, Tools, and Methods

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What is Assessment and Why Is It Important?

Broadly, the improvement of some aspect of a program or institution

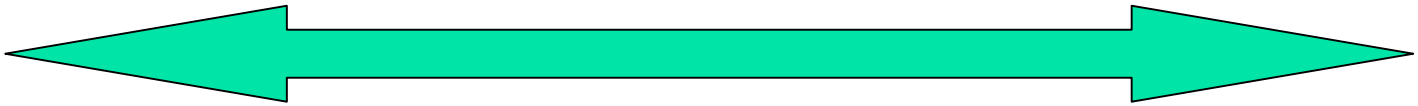
- Internal Needs
  - Program and Institutional Improvement
- External Needs
  - Accreditation
  - Public accountability

Internal Benefits of Assessment

(Adapted from Peter Ewell)

- Improving Academic Programs
- Revising Curricula
- Strengthening Student Services and Satisfaction
- Improving Student Retention and Enrollment Management
- Focusing Faculty Development and Building Morale
- Encouraging Faculty Initiative and Collaboration
- Enhancing Administrative Policy Making
- Establishing Comparative and Competitive Advantage for Strategic Planning
- Enriching Development and Funding Initiatives
- Demonstrating Mission Goal Attainment and Institutional Effectiveness for Both Accreditation and Accountability

Two major forms of assessment:



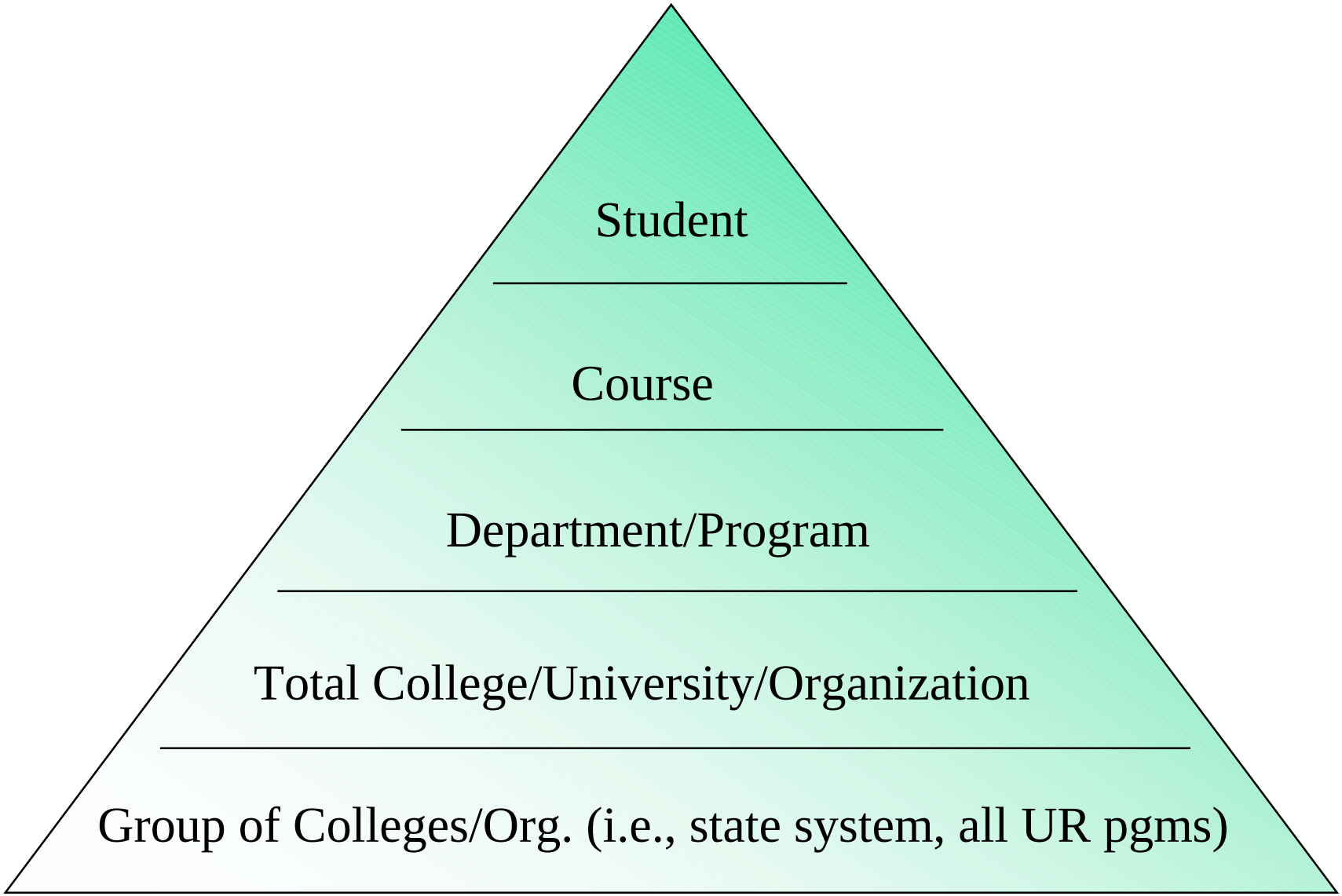
Formative (for improvement)

- learning measures
- decentralized
- most student centered
- direct measures
- soundest evidence
- least public

Summative (for accountability)

- performance measures
- centralized
- least student centered
- indirect measures
- weakest evidence
- most public

What is to be assessed? Think about the Levels of Assessment



What Assessment Is Not

(Adapted from Patrick T. Terenzini)

- It is not a solely administrative activity. Faculty must not merely tolerate or endorse assessment, they must actively engage in it.
- Should not be part of institution's faculty evaluation system. It should promote self-examination, critical questioning, evaluation, and renewal, but it should not punish individuals or programs honestly seeking to improve.
- Not intrusion into a faculty member's classroom, nor does it infringe on academic freedom.
- It is not necessarily testing, nor a series to tests. Testing can be a part of assessment.
- Not quick nor easy. It is a conceptually, educationally, politically, and administratively complicated business.

Outcomes for Institutional Effectiveness Vs. Student Learning Outcomes (Frye, 1999)

Institutional Effectiveness uses aggregate statistics on groups of students

- Graduation, retention, transfer rates
- Employment rates for graduating class
- SAT/ACT scores, gpas by class

Institutional outcomes– measure comparative institutional performance, not changes in students themselves due to the college experience

Institutional Outcomes

- Measure comparative institutional performance, not changes in students themselves due to the college experience
- Are computed without regard to student differences
- Computed (and possibly determined) without regard to how different students experience the college environment
- As a result– don't distinguish how much of outcome is product of the institution, its programs, or individual student characteristics

Student Learning Outcomes

- Encompass wide range of student attributes and abilities that measure how the college experience supported individual development
- Cognitive – acquisition of specific knowledge & skills (i.e., in major); pre-post measures
- Affective – how has the college experience affected student values, goals, attitudes, self-concepts, world views
- Behavioral- academic and psychosocial

Effective Assessment Includes Asking These Questions:

- What are the goals/expectations of this assessment?
- Who, what, when, and how should we assess?
  - type of administration (web, paper survey, qualitative focus grp. or interview
  - method for data collection (mail, classroom)
  - sampling procedure
- How (and who) will data analysis be completed?
- How and with whom will the findings be reported?
- How will we refine the program and assessment methods (if needed) in the next cycle?

Six Important Questions in the Assessment Process

1. Why are we doing this assessment?
2. What/Who will we assess?
3. When will we assess?
4. How will we assess? Do we have $$ and personnel?
5. How will the results be analyzed?
6. How will the results be communicated and to whom?

Adapted From Upcraft & Schuh's *Assessment in Student Affairs;* modified by KB

Conceptual Issues

WHAT should we measure?

- Our mission statement suggests that we measure...
- Our program goals and objectives suggest that we measure...
- Our external public wants/expects us to measure ....
- Our professional literature suggests we measure...
- Other programs like ours are assessing...

Conceptual Issues

Who should we measure?

- What is the target population to which you would like to generalize?

- Are you interested in particular subgroups of students?

  Sex, Race, Age, SES, Major, Levels of Research?

Conceptual Issues

WHEN should we measure?

- Do you plan to assess developmental change across time?
  - If YES, identify a meaningful cohort of students to assess at multiple points of contact.
  - If NO, identify a meaningful cohort to assess at one point in time

Conceptual Issues

WHEN should we measure?

- What are the critical “milestones” when developmental change is most likely to occur?

  •Plan your assessment efforts to coincide with these milestones.

Conceptual Issues

WHEN should we measure?

- Do you want to link the developmental change in students to specific program efforts?

  - If YES, how long will it take for the developmental change to occur after students participate or the program is over?

Individually, and then share with neighbor:

- What are the goals/expectations of your assessment?
  - Use office mission statement as guideline
  - Who are the stakeholders; what are their expectations?
- Who, what, and when should you assess?

Conceptual Issues

- How should we assess?
  - type of administration (web, paper survey, qualitative focus group, interview
  - method for data collection (mail, classroom)
  - design (one-time snapshot, longitudinal)
  - sampling procedure
  - funding and personnel

Sources for Academic Quality & Effectiveness Data

- Prospective Student Surveys
- Entering Student Surveys - demographics, attitudes, values, goals
- Freshman to Senior Year Cohort Studies
- Student Satisfaction Surveys
- Assessment in the Major; department reviews
- Alumni Studies
- Faculty Productivity
- Assessment of General Education
- Program/Department Review

Data Collection Strategies

Indirect Student Contact

- Paper/pencil survey
- Web survey
- Database/Warehouse
- Existing Reports
- Naturalistic observation

Direct Student Contact

- Personal interview
- Focus group
- Telephone poll
- Telephone interview

Should I purchase an instrument or create my own??

If you develop your own instrument:

- Can be less expensive (at least in dollars)
- Can address program-specific issues
- Can be very time consuming
- Must attend to formatting, ease of completion for respondents, printing, on-site scoring
- May require pilot testing
- Can require extensive commitments for reliability, validity checks or can jeopardize credibility
- Can increase chances for criticism, skepticism

Should I purchase an instrument or create my own??

If you purchase an instrument:

- Requires less time for design, printing, etc.
- Likely has established reliability and validity information
- Often includes norms groups for inter-institutional comparisons
- May include scoring and reporting services
- Increases face validity; may add credibility
- May not fit your curriculum & goals
- Can be expensive

Seven Steps to Survey Design

1. Outline topics and draft items
2. Choose response formats
3. Edit items, keeping in mind distribution method
4. Determine item sequence
5. Determine physical characteristics of survey and cover letter
6. Review and revise survey [often many times!!!]
7. Pilot test survey & revise

Individually, and then share with neighbor

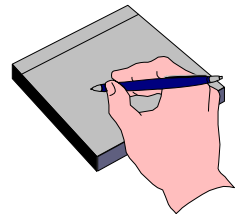
- How should we assess?

  - type of administration (web, paper survey, qualitative focus group or interview)

  - method for data collection (mail, classroom, telephone, computer)

  - sampling procedure

Examples of Assessment Instruments



Academic/Program Assessment

- CAAP (from ACT), Profile (ETS)
- Watson-Glaser, California Test of Critical Thinking
- Reflective Judgement Interview, MER, MID
- Measures of Subject Knowledge
- Benchmark Studies (EBI Engineering, Nursing)
- See NPEC Sourcebook: http://nces.ed.gov/pubs2000/2000195.pdf
- Portfolio Evaluation

Instruments for Measuring Self-Reported Growth

- ACT College Outcomes Measures Program (ACT-COMP) and ACT Student Opinion Survey
- ETS Critical Thinking Task
- College Student Experiences Questionnaire (CSEQ); National Survey of Student Engagement (NSSE, Pace/Kuh)

Example Instruments

- **Student Satisfaction, Program Use**
  - National Survey of Student Engagement
  - Student Opinion Survey (ACT)
  - ACUHO-I/EBI Engineering, Nursing Surveys
- **Faculty Surveys**
  - National Survey of Postsecondary Faculty
  - UCLA Higher Education Research Institute Faculty Survey

Assessment Information and Measures

- Assessment Resources via Institutional Research: http://airweb.org/links/assess.cfm
- American College Testing, Inc.: act.org
- College Student Experiences Questionnaire: indiana.edu/~cseq
- Costa, P. & McCrae, R. (1992). Revised NEO Personality Inventory and FFI Professional Manual. Psychological Assessment Resources, Inc. Odessa, FL., www.parinc.com.
- Educational Testing Service: www.ets.org
- ERIC Clearinghouse Test Locator: eriche.org
- National Survey of Postsecondary Faculty: http://nces.ed.gov/pubs2002/quarterly/winter01/q4-1.asp
- NPEC Assessment Website: nces.ed.gov/npec/evaltests/
- EBI Benchmarking: webebi.com
- Watson, G.B. & Glaser, E.M. (1994). Watson-Glaser Critical Thinking Appraisal, Form S, San Antonio, TX: Psychological Corporation. http://www.psychcorp.com/catalogs/hra/hra021apsy.htm
- Wood, P.K. (1997). A secondary analysis of claims regarding the Reflective Judgment Interview. In J. Smart (Ed.) Higher Education: Handbook of Theory and Research, 12, pp. 243-312. Bronx, NY: Agathon.
- UCLA Higher Ed Research Institute: www.gseis.ucla.edu/heri/heri.html

Individually, and then share with neighbor:

- How (and who) will data analysis be completed?
- How and to whom will the findings be reported?
- Do we have the funds and personnel resources?

The Value of Alumni Studies

- Alumni Studies focus on the important true outcomes
  - Additional Education and Degrees Earned
  - Occupation and Career Attainment & Satisfaction
  - Employer Satisfaction
  - Income and Socio-economic Status
  - Leadership and Service
  - Awards and Recognition
  - Contin. Membership & Participation in Alumni Organization
- Can allow you to compare program effectiveness

The Value of Qualitative Data
(content analyses, focus groups, interviews)

- Provide a richness and depth of response not achievable in survey
- Can be used to complement or supplement quantitative data
- Can be used for formative as well as summative assessment
- Open-ended comments can be categorized for easier understanding
- Depending on number, may not be useful for generalization

The Costs of Assessment

- Start up costs (e.g. consultant services, database development, conference attendance, faculty & staff time for organizational meetings).
- Support staff for administration & coordination.
- Instruments, printing, & postage (estimates range from $10-$20 per student, Rossman & El-Khawas, 1987)
- Analysis and dissemination of the results.

The Costs If You Don't Assess!

- Inability to examine student growth or satisfaction
- No rationale for modifying or strengthening existing programs
- Inefficient decision & policy making
- And this may impact:
- Faculty, student, and staff satisfaction, morale, & commitment to the program
- Perceived program attractiveness
- Alumni, state, & federal funding

Adapted from: Terenzini, P. (1987). Assessment with Open Eyes: Pitfalls in Studying Student Outcomes. *Journal of Higher Education, 60,* 644-664.

In Summary

- Assessment is important and useful for both internal and external constituencies
- Primary goal is improvement
- Can not be done overnight; should be ongoing and will take lots of hard work
- Develop a 3-5 year assessment plan for your UR program

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- Huba, M., & Freed, (2001). *Learner-centered assessment on campus: Shifting the focus from teaching to learning*. Boston: Allyn & Bacon.
- Palomba, C. (1999). *Assessment essentials : planning, implementing, and improving assessment in higher education.* San Francisco: Jossey-Bass.