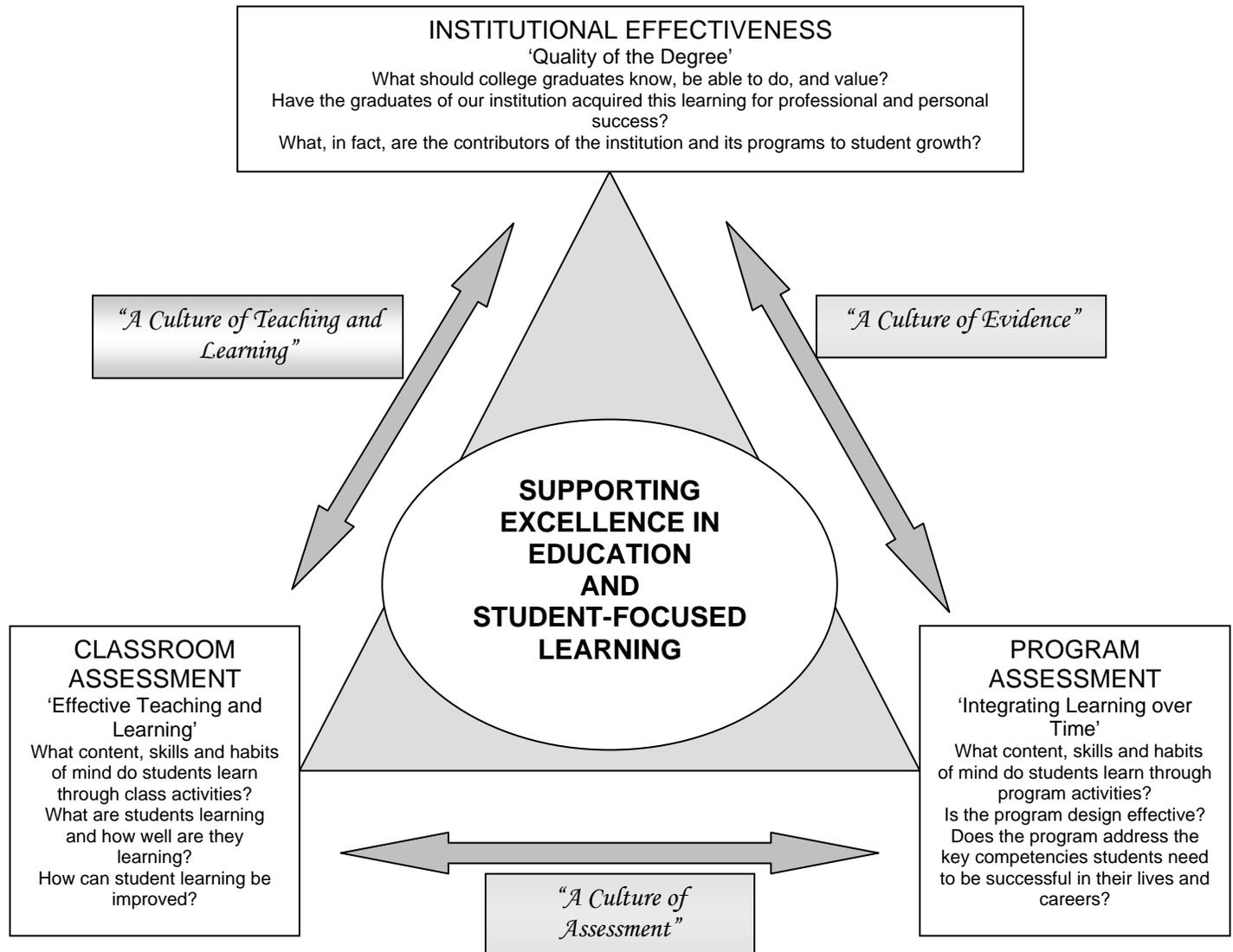


# ASSESSMENT

## “A Guide” For Developing a Program Assessment Plan

... collaboratively building and sustaining a culture of inquiry and evidence that supports excellence in academic programs and services, and values the continuous improvement of teaching and learning.



## Shared Vocabulary “Key Terms”

Assessment – The systematic collection, review and use of information about educational programs undertaken for the purpose of improving student learning and development. (Marchese, 1987; Palomba & Banta, 1999)

- Institutional Effectiveness - Assessment to determine the extent to which a college or university is achieving its mission.
- **Program-level Assessment - Assessment to determine the extent to which students in an academic program can demonstrate the learning outcomes for the program.**
- Classroom (Course) Assessment - Assessment to determine the extent to which a specific course is achieving its learning goals, as well as, assessment to improve teaching of specific courses or segments of courses.

Mission – A holistic vision of the values and philosophy of a program, department or institution.

Goals, Outcomes (Objectives):

- Program Goals – Statements that describe what the program will achieve.
- Student Learning Outcomes – The knowledge, skills, and dispositions that students should be able to demonstrate upon graduating from a program and/or institution.
- Course Goals – The goals of the course; what the instructor tends to cover and do.
- Course Objectives – Student expectations for the course; what the instructor expects the students to be able to know, to do or to believe by the end of the course.

Assessment Strategies (Measures)

- Direct Evidence – A tangible, visible, self-explanatory evidence of exactly what students have and have not learned.
  - Performance Assessment - The process of using student activities or products to evaluate students' knowledge, skills, and development.
    - Authentic Assessment - a form of performance assessment in which the activity simulates the contexts, tasks and ways people in "real-life" situations use knowledge and skills.
- Indirect Evidence – Evidence that deduces student achievement of learning outcomes through the students' reported perception of their own learning.
- Quantitative Assessment – Methods that rely on numerical scores or ratings.
- Qualitative Assessment – Methods that rely on descriptions rather than numbers.
- Formative Assessment – The assessment of student achievement at different stages of a student's academic career.
- Summative Assessment – The assessment of student achievement at the end point of their education.
- Embedded Assessment (Course) – A method in which evidence of student learning outcomes for the program is obtained from assignments in particular courses in the curriculum.
- Add-On Assessment – Assessment strategies beyond course requirements.
- Traditional Assessment – Assessment strategies often completed in a controlled, timed examination setting and are usually designed only to collect assessment.
- Supportive Evidence – Information gathered for the purpose of program evaluation, quality of the curriculum, and/or administrative purposes. These related measures may be used in conjunction with evidence gathered through direct and indirect measures to provide additional information about learning when viewed within the larger picture.

Performance Indicator (Criteria for Success) – A description of an observable and measurable characteristic or change that represents achievement of an outcome. The standard by which student performance is evaluated. Criteria for assigning a score or the dimensions of proficiency in performance used to describe a student's response to a task or judging the results of student learning.

- Benchmarking (Peer-reference or Norm-referenced) – Compares student performance or score against their peers either established by use of its own program or from other institutions.
- Standards-based (Competency-based or Criterion-referenced) – Compares student performance or score against an established standard.
- Best-Practice (Best-in-class) – Compares your results against the best of your peers.
- Value-added (Growth or pre-post) – Compares results against student scores when they started or entered the program to the end of the program or course of study.
- Longitudinal – Compares student performance or scores against peers in prior years.

Scoring Rubric - A determined set of criteria that describes the characteristic(s) of a learning outcome and the level of achievement in each characteristic(s).

Reliability - the extent to which an experiment, test, or any measuring procedure yields the same result on repeated trials.

Validity - refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. Validity has three components: relevance (direct measurement), accuracy (how precise are the measurements), and utility (how clear are the implications for improvement).

“Close the loop” or “Feedback loop” - Using assessment results for program change and improvement.

Triangulation - the use of a combination of assessment methods in a study.

‘BEST PRACTICE’  
OUTCOMES-BASED STUDENT LEARNING ASSESSMENT

### WHY ASSESS STUDENT LEARNING OUTCOMES?

Focus is on assessing what our students have learned as a result of the educational program.

- ✓ KNOWLEDGE (cognitive – ‘stuff in heads’)
- ✓ SKILL (psychomotor, behavioral – ‘do; physical ability’)
- ✓ ATTITUDE (affective, value, dispositions, think – ‘habits of mind’)

### WHAT ARE THE QUESTIONS?

Purpose is to obtain information that can be used by program faculty to answer .....

- ✓ Are our students learning what we think is important?
- ✓ Are they learning what they need to succeed in this field or profession?
- ✓ Are we improving our ability to help student learn?
- ✓ Should our curriculum or teaching strategies be modified?
- ✓ Are there other techniques or additional resources that would help our students learn more effectively?

### WHAT ARE THE ELEMENTS OF AN EFFECTIVE ASSESSMENT PLAN?

- a) Decide on your purpose. (Mission)
- b) Articulate in measurable & observable terms program-level student learning outcomes. (SLO)
- c) Connect the outcomes to the program. (Curriculum alignment)
- d) Agree on the strategies (measures), connect with the outcomes, establish your expected level of performance, and collect the evidence. (Strategies; Culture of Evidence)
  - Programs do not have to measure every outcome every year using all students. A multi-year plan to assess specific outcomes on a staggered basis is more effective in terms of the reality of the time available and the capacity of the faculty to process the results and determine how to make improvements.
  - Select assessment strategies that will provide the program faculty the most useful and relevant information about student learning and development. Choose strategies that match your program’s culture or discipline. *Remember: The findings you collect must have meaning and value to those who will be asked to make changes based on the findings.*
  - The evidence you collect depends on the questions you want to answer.  
Adapted from Volkwein, J. *Program evaluation and assessment: What’s the question* (1996).
    - ✓ *Does the program meet or exceed certain standards?*
    - ✓ *Does the program do a good job at what it sets out to do?*
    - ✓ *How can the program experience be improved?*
    - ✓ *How does the program compare to others?*
  - Use multiple strategies (measures) to assess learning and that allow you to assess the strengths and weaknesses of your program.  
Adapted from OAPA Handbook. *PROGRAM-based review and assessment*. UMASS Amherst.
    - ✓ Multiple measures can assess different components of a complex task.
    - ✓ No need to design an all-purpose strategy.
    - ✓ Greater accuracy is achieved when several strategies produce similar findings or it provides the opportunity to pursue further inquiry when findings contradict each other.
- e) Use results for improvement. (Use & Share Results; Close the loop)
  - Facilitate discussion of curriculum and pedagogy at faculty meetings, committee meetings and retreats.
  - Facilitate discussion about the advising process.
  - Refine current assessment methods, instruments and/or practices.
  - Share results (information) with alumni and review boards.
  - Change course content or design.
  - Change assignments or assignment sequence.
  - Revise examination content and/or structure.
  - Change pedagogy.
  - Change relationships between faculty and students.

## WHAT STRATEGIES (MEASURES) HAVE THE POTENTIAL TO PROVIDE MEANINGFUL EVIDENCE ABOUT STUDENT LEARNING?

It is not just data; it is quantitative and/or qualitative. It is information that supports a claim; answers a question; leads to knowledge; stimulates analysis; suggests action.

- ❖ **Direct Evidence:** Actual student work...
  - Project or activity from the capstone experience
  - Portfolio
  - Standardized tests (e.g. - Major Field Achievement Test, Test of Critical Thinking Ability, Academic Profile, or the Watson-Glasser Critical Thinking Appraisal)
  - Performance on national licensure, certification, or professional exams. (Summaries lacking a breakdown by area are of limited value in identifying areas of programs that need to be strengthened.)
  - Locally developed tests (when validated and authenticated)
  - Essay questions with blind scoring
  - Reflection papers; Journaling
  - Qualitative internal or external juried reviews of comprehensive senior projects; external reviews of exhibitions and performances in the arts
  - External evaluation of performance during internship or student teaching.
  - Oral presentation - live, videotape or audiotape
- ❖ **Indirect Evidence:** Report of perception about learning...
  - Alumni, employer, and student surveys
  - Instructor/faculty survey
  - Exit interviews
  - Focus groups
  - Graduate follow-up studies
  - External or peer review
- ❖ **Supportive Evidence:** Typically considered non-measures of learning; Administrative information; Inputs; Other curricular and administrative documents ...
  - Enrollment trends; Retention and transfer studies
  - Time to degree
  - SAT, ACT; GRE, GMAT scores
  - GPA
  - Graduation rates and transfer rates
  - Job placement data; Graduate school placement rate
  - Student Publications; Research presentations; Honors
  - Student participation rates in faculty research, publications and conference presentations
  - Curriculum analysis (Course prerequisites; credit hours)
  - Syllabus analysis (Learning experiences)
  - Course taking pattern (Transcript audit)
  - Faculty/student ratios
  - Percentage of students studying abroad
  - Diversity of the student body
  - Program documents, publications and/or website

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