When and for What End?

**FORMATIVE**
- Assessments are conducted throughout the course or program (e.g., trends, progress at midpoint).
- Example: Evaluating the first lab report in order to provide feedback for improvement. Also serves as a gauge of early performance (e.g., pre-test).

**SUMMATIVE**
- Assessment measures are used at the conclusion of a course or program, to reflect the sum total or a final product that measures achievement or performance.
- Example: Comprehensive or final exam to critically evaluate complex issues (assumes student is given the opportunity to practice analysis across the program/course).

Sources: Andrea Leskes, Assessment Glossary. AACU, Peer Review, Winter/Spring 2002; http://www.aacu.org/peerreview/pr-sp02/pr-sp02realty.cfm
James Madison University (JMU) Dictionary of Student Outcome Assessment; http://people.jmu.edu/yangx/index.htm
Against What?

- **STANDARDS-based**
  - A set level of accomplishment by students.
  - **Example:** Having a conversation about daily activities in a foreign language evaluated for proper use of grammar. Students mastery is assessed.

- **VALUE ADDED**
  - Measures are used to assess the increase in learning that occurs during a course, program, or undergraduate education.
  - Requires a baseline or pre-test measurement for comparison.
  - **Example:** Whether senior papers demonstrate more sophisticated writing skills (in the aggregate) than freshmen papers.

By Whom?

- Measures are developed and/or assessment made by institution's faculty based on their teaching approaches, student capabilities and learning outcomes.

- Measures are developed and/or assessment made by an individual or organization external to the institution.

  **Example: Standardized tests**
  - Major Field Achievement Test (MFAT),
  - ACT's Collegiate Assessment of Academic Proficiency (CAAP),
  - ETS' Academic Profile,
  - Graduate Record Exam (GRE),
  - Graduate Management Aptitude Test (GMAT)

Issues in Assessment Methodology

Where?

- **COURSE-EMBEDDED**
  - Collecting assessment data on assignments, tests or work of students as a normal part of their course work
  - Examples: Course-related work or projects, comprehensive exams, recitals, internships, instruments including questions in a course test

- **CO-CURRICULAR**
  - Assessment conducted in out-of-class activities
  - Example: Assessing performance in group decision-making and problem solving while working to build an architectural model for a planned retirement community.

On Whom?

- **INDIVIDUAL**
  - Measures are applied to individual students or a sample of students.
  - Example: Portfolio assessment

- **COLLABORATIVE**
  - Measures are applied to or observed on a group of students working together.
  - Example: Assessing communication or teamwork skills among people in research teams working on a research project; group projects.

Lopez (1997)
Meaning?

**QUANTITATIVE**

- Measures that yield data which can be analyzed using objective methods.
- Generalizations based on analysis of numerical data.
- Example: Essay questions blind scored by faculty; use of rubrics.

**QUALITATIVE**

- Measures that yield data that are subjective or quasi-objective.
- Can support findings from quantitative analysis.
- Example: “Themes” that emerge from students’ final essays, term paper, or lab reports.

Lopez (1997)
Issues in Assessment Methodology

Incomplete Measures

- Some measures are not adequate, reliable, or incomplete measures of student learning. They do not provide direct evidence of student learning.

- Examples:
  - Questionnaire asking students if their personal goals for the course or major or program have been met
  - Measures and reports associated with program evaluation:
    - Instruments for specialized program review
    - Curriculum review reports
    - Evaluation report of individual programs submitted by program-specific and specialized accrediting agencies, visiting committees, or committees of external peer experts

Lopez (1997)
Incomplete Measures

- Examples (cont.)
  - Information gathered not for assessment but for specific administrative purposes
    - Faculty publications and recognition
    - The kinds of courses or majors students select, including course enrollments and course profiles
    - Faculty/student ratios
    - The percentage of students who study abroad
    - Enrollment trends
    - The percentage of students who graduate with the baccalaureate in five years
    - The diversity of the student body
Incomplete Measures

- Examples (cont.)
  - Grades and GPAs
    - Is a reflection of a student’s overall achievement but does not tell exactly what the student has actually learned in the course; or about what a student’s competencies or talents really are, unless broken down to assessing the components of expected learning outcomes
  - Ex. Several students may have the same grades but they may be weak on some specific knowledge or ability > can not be captured by grade alone > findings can help faculty determine ways to enhance the students’ learning on specific learning outcomes

Lopez (1997)