Assessment of Student Learning: An Introduction

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Overview

• What is Assessment?
• Why Assess?
• The Assessment Process
  – Program Goals and Student Learning Outcomes
  – Ensuring Learning Opportunities: Curriculum maps
  – Measuring Student Learning: Rubrics, not Grades
  – Collecting, Analyzing, and Using Results: Action Plans
• Assessment and You
What Is Assessment?

• The Systematic Collection
• Of Information about Student Learning
• Using Available Resources
• In Order to Inform Decisions
• About How to Improve Student Learning
Characteristics of Good Assessment

- Focused on Educational Outputs, Not Inputs
- Useful: Intended to Inform Action
- Feasible with Limited Resources
  - Built on Existing Efforts (e.g., class assignments)
- Tied to Key Processes (e.g., APR, strategic planning, budgeting)
- Owned by the Faculty
Why Assess?

• Continuous Improvement of
  – Teaching and Student Learning
  – Academic Programs
  – Institutional Planning and Decision-making

• Accountability: Demonstrating Effectiveness to
  – Accrediting Agencies (SACSCOC)
  – Funding Sources (government, foundations, business, individuals)
  – Prospective Students and Faculty
Levels of Academic Assessment

- University
  - General Education
- *Department
  - Degree Programs
  - Stand-alone Certificates
- Individual Faculty
  - Courses
  - Other Educational Experiences
The Assessment Process: 7 Steps

• Defining Program Mission and Goals
• Specifying Student Learning Outcomes (SLOs)
• Ensuring Learning Opportunities: Curriculum Map
• Choosing Effective Measures: Rubrics, not Grades
• Setting Targets
• Collecting and Analyzing Evidence
• Using Results: Action Plans
1. Identify goals / purpose
2. Determine student learning outcomes / questions
3. Identify curricular and/or co-curricular learning activities
4. Identify assessment methods
5. Identify expected level of performance
6. Identify strengths and areas for improvement
7. Gather evidence
8. Analyze and interpret evidence
9. Implement learning activities
Types of SLOs

• Knowledge and Understanding
  – Factual Content
  – Methods and Procedures

• Skills and Abilities
  – Critical Thinking
  – Problem-solving
  – Communication

• Attitudes, Values, and Dispositions
  – Ethical Orientation
  – Sensitivity to Alternative Perspectives
7 Characteristics of Good SLOs

• Consistent with Program Goals
• Comprehensive: Cover main program elements
• Focused on Student Learning (not teaching)
• Neither Too Broad Nor Too Narrow
• Ambitious but Attainable
• Measurable
• Actionable: Can be used for program improvement
Examples

• Students independently design and carry out experimental research that yields valid results
• Students recognize and articulate the assumptions, central ideas, and main criticisms of psychoanalysis
• Students develop lesson plans for teaching at the elementary level
• Students communicate effectively with guests in hospitality industry settings
Ensuring Learning Opportunities

• Levels
  – Program: Curriculum Maps
  – Course: Content, Pedagogy, Assignments

• Steps
  – Introduction
  – Reinforcement/Practice
  – Mastery
  – Assessment
<table>
<thead>
<tr>
<th>Content</th>
<th>Introductory Course</th>
<th>Research Methods</th>
<th>Advanced Content A</th>
<th>Laboratory/Practicum Course</th>
<th>Advanced Content B</th>
<th>Advanced Content C</th>
<th>Advanced Content D</th>
<th>Capstone Course</th>
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</thead>
<tbody>
<tr>
<td>SLO 1: Disciplinary knowledge base (models and theories)</td>
<td>Introduced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Reinforced</td>
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<td>Mastery / Assessed</td>
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<tr>
<td>SLO 2: Disciplinary methods</td>
<td>Introduced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Mastery / Assessed</td>
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<td>SLO 3: Disciplinary applications</td>
<td>Introduced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Mastery / Assessed</td>
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<td>Critical Thinking</td>
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<td>SLO 4: Analysis and use of evidence</td>
<td>Introduced</td>
<td>Reinforced</td>
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<td>SLO 5: Evaluation, selection, and use of sources of information</td>
<td>Introduced</td>
<td>Reinforced</td>
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<td>Mastery / Assessed</td>
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<td>Communication</td>
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<td>SLO 6: Written communication skills</td>
<td>Introduced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Mastery / Assessed</td>
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<td>SLO 7: Oral communication skills</td>
<td>Introduced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Reinforced</td>
<td>Mastery / Assessed</td>
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<td>Integrity / Values</td>
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<td>SLO 8: Disciplinary ethical standards</td>
<td>Introduced</td>
<td>Reinforced</td>
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<td>Reinforced</td>
<td>Mastery / Assessed</td>
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<td>SLO 9: Academic integrity</td>
<td>Introduced</td>
<td>Reinforced</td>
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<td>Reinforced</td>
<td>Mastery / Assessed</td>
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<td>Project Management</td>
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<td>SLO 10: Interpersonal and team skills</td>
<td>Introduced</td>
<td>Reinforced</td>
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<td>Reinforced</td>
<td>Mastery / Assessed</td>
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<td>SLO 11: Self-regulation and metacognitive skills</td>
<td>Introduced</td>
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<td>Reinforced</td>
<td>Mastery / Assessed</td>
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</table>
Types of Measures

• Direct (student work)
  – Exams
  – Writing Assignments
  – Oral Presentations/Performances
  – Portfolios/Capstone Projects
  – Theses/Dissertations

• Indirect
  – Student/Alumni Surveys
  – Exit Interviews/Focus Groups
  – Reflective Essays
Why Not Use Grades?

• Grades Alone May
  – Leave Unclear Expectations for Learning
  – Collapse Information About Multiple SLOs
  – Incorporate Other Aspects of Student Performance (attendance, participation, etc.)
  – Be Difficult to Translate into Program Improvements
Using Rubrics

• Types of Rubrics
  – Checklist
  – *Descriptive

• Advantages of Rubrics
  – Differentiate SLOs in an Assignment
  – Define Levels of Performance/Ensure Consistency
  – Clarify Faculty Expectations
  – Provide Detailed Feedback to Students
# Value-added Rubric for CTW (v.2)

<table>
<thead>
<tr>
<th>Skill/ability</th>
<th>Absent/Beginning (1-2)</th>
<th>Developing/Inadequate (3-4)</th>
<th>Competent/Adequate (5-6)</th>
<th>Advanced/Sophisticated (7-8)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification/articulation of key issue or question</td>
<td>Statement of issue is absent or incoherent</td>
<td>States issue/question, but not in a clear manner</td>
<td>Clear statement of the issue or question to be addressed</td>
<td>Sophisticated presentation of the issue/question, reflecting an understanding of nuances and context</td>
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<tr>
<td>Formulation of student’s position (thesis/argument) on the issue</td>
<td>Fails to formulate a position on the issue/question, or position is incoherent</td>
<td>Position is present but not clearly articulated</td>
<td>Clear statement of student’s position on the issue/question</td>
<td>Sophisticated and nuanced statement of student’s position</td>
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<tr>
<td>Effective use of reasons and/or evidence in support of position</td>
<td>No reasons/evidence provided, or given reasons/evidence are not relevant</td>
<td>Some reasons/evidence provided, but do not effectively support student’s position</td>
<td>Given reasons/evidence are effective and adequate</td>
<td>Sophisticated and thorough use of reasons/evidence in support of student’s position</td>
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</tr>
<tr>
<td>Organization of material</td>
<td>Incoherent or illogical organizational structure</td>
<td>Organization of material is simplistic</td>
<td>Presentation of reasons and evidence is logical and coherent</td>
<td>Organization of material is compelling and creative</td>
<td></td>
</tr>
<tr>
<td>Presentation of conclusions</td>
<td>Conclusions are absent or not clearly stated</td>
<td>Conclusions are present but consist mainly of a simplistic summary</td>
<td>Clearly stated conclusions, but not exploration of implications or consequences</td>
<td>Clearly stated conclusions with examination of implications and/or consequences</td>
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</table>
Setting Targets

• Local versus External Standards
• Differentiated versus Minimum Standards
• Value-Added Targets: Before/After Assessment
• Historical Trends: Improvements over Time
Collecting and Reviewing Evidence

• Every Year/Semester or Less Frequently?
• All Classes or a Sample?
• All Students or a Sample?
• Individual Faculty or a Committee?
Analyzing the Findings: What Do They Mean?

• Were the Findings Clear?
• Were Measurement Tools Appropriate?
• Was a Representative Sample Assessed?
• Were the Sources Comparable?
• Were Targets Met?
• Were Targets Meaningful?
• Were There Shortfalls in Student Learning?
Using Assessment Results

• Reports
  – To Program Leaders and Faculty
  – To Oversight Bodies for Review

• Faculty Discussions

• Action Plans for Program Improvement
  – Program: Purpose, SLOs, Curriculum, etc.
  – Individual Course Content and/or Pedagogy
  – Assessment Process Itself
Assessment and You: Implications for Individual Faculty

• Choosing Course Learning Objectives
  – Are They Consistent with Program Goals/SLOs?
  – To Which Stages of Learning Do They Correspond?

• Designing Course Learning Opportunities
  – Where/How Will Students Learn and Practice What You Want Them to Learn?

• Identifying Appropriate Assessments
  – Do They Get At What You Want Students to Learn?
  – Do/Should They Dovetail with Program Assessments?
Assessment and Academic Freedom

• Faculty members are responsible for establishing educational goals for student learning, for designing and implementing programs of general education and specialized study that intentionally cultivate the intended learning, and for assessing student achievement... Academic freedom is necessary not just so faculty members can conduct their individual research and teach their own courses, but so they can enable students—through whole college programs of study—to acquire the learning they need to contribute to society.

Useful Sources on Assessment

• Trudy Banta, Assessing Student Learning: A Common Sense Guide, 2\textsuperscript{nd} (2009)
• Barbara Walvoord, Assessment Clear and Simple: A Practical Guide, 2\textsuperscript{nd} ed. (2010)
• American Association of College and Universities VALUE Rubrics (http://www.aacu.org/value/rubrics/index)
Thanks for Your Interest!

Please visit the Office of Academic Assessment at http://oie.gsu.edu/academic-assessment-and-review/