Six-Step Assessment Process:
Student Learning Outcomes & Performance Outcomes

Assessment: Basics

09.20.18
Get ready for WSCUC

Areas of Concern:
- Integrated strategic plan
- Assessment
- Student success
- Funding

2012 Reaccredited (7 yrs) → 2015 Interim Report → 2016 Mid-Cycle Report

Fall 2018 Self-Study Due → Spring 2019 Off-Site Review → Fall 2019 On-Site Visit
Where do we carry out assessment

University Learning Goals
Strategic Plan Goals

Division POs/SLOs

Unit POs/SLOs
Six-step assessment process*

What do we want our students to learn and/or our units to accomplish?

- Develop Student Learning/Program Performance Outcomes
- Document Assessment Activities
- Plan & Execute Improvement Actions
- Collect & Analyze Data
- Identify Methods & Measures
- Determine Criteria for Success

How are we doing?
How do we know?
What evidence do we need to know to determine whether we are successful?

How are we documenting the assessment AND improvement activities/results?

What changes are we making?
Are the changes working?

How do we use data to confirm/improve our practices?

*AEEC Spring 2014*
Step 1: Develop SLOs/POs

• A statement

**SLO**

• Significant & essential learning that students achieve at the end of a program
• Knowledge; Skill; Attitude
• Focus on student learning

**PO**

• Measurable end results or consequences of activities, services, or program
• Variety of results
• Focus on operational effectiveness

*SLO or PO?*

*Depends on the nature of the outcome, not the function of the unit*
Where do outcomes come from

- “Top-down” vs. “Bottom-up”
- Adapt from existing “best practices”
- Engage faculty/staff
- Involve important but often forgotten stakeholders (students, alumni, employers, etc.)
Mission

Goals

Outcomes

Mission
Holistic vision of the values and philosophy of an institution/division/department/unit

Goals
Broad, general statements about general aims, purpose or expectations
Unit/Program-centered

Outcomes
Clear, specific “operational definitions” of goals
Customer/Learner-centered
What are good outcomes

- Customer/Learner-centered, not unit/program-centered
- Aligned with the mission and goals of university, division, college, etc.
- Focus on “high-priority learning”
- Real (not aspirational)
- Simple language
- Specific, clear and concise
- Demonstrable and measurable
- Discrete (no “double-barrel” statements)
- Manageable (more is not better)

*Adapted from Mary Allen workshop (2006) & ALA (2016)*
### Sound SLOs are Active

<table>
<thead>
<tr>
<th>LEVELS of SLOs (Bloom et al., 1956)</th>
<th>BLOOM’S TAXONOMY EXAMPLE ACTION VERBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>Assess, Conclude, Criticize, Justify, Value</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Assemble, Create, Design, Produce, Reconstruct</td>
</tr>
<tr>
<td>Analysis</td>
<td>Analyze, Compare, Differentiate, Experiment, Solve</td>
</tr>
<tr>
<td>Application</td>
<td>Apply, Demonstrate, Modify, Practice, Use</td>
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<tr>
<td>Comprehension</td>
<td>Convert, Explain, Interpret, Paraphrase, Report</td>
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<tr>
<td>Knowledge</td>
<td>Define, Describe, List, Name, Outline</td>
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## Outcome examples*

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<tr>
<th>Unit</th>
<th>PO</th>
<th>SLO</th>
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<td>Career Center</td>
<td>Students receive adequate support and feedback on their job seeking effort.</td>
<td>Students demonstrate professionalism in the job seeking process.</td>
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<tr>
<td>Center for Scholars</td>
<td>McNair Scholars are provided with step-by-step guidance to transition into graduate school.</td>
<td>McNair Scholars can identify necessary steps for a successful transition into graduate school.</td>
</tr>
<tr>
<td>OAIE</td>
<td>Student Assessment Scholars will receive high quality training to carry out learning assessment activities.</td>
<td>Student Assessment Scholars can apply basic research skills to carry out learning assessment activities.</td>
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*Suggested, not actual, outcomes*
Case Study: Step 1
Step 2: Identify methods and measures learning

• We are *already* and *always* assessing how we are doing and/or how our students are learning

• The evidence/measures already in place are NOT always the best place to start
  • Do the measures address the outcomes?
A bit of vocabulary

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<th>Direct</th>
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Choosing the right measure

• **Valid:** Are you measuring the outcome?
• **Reliable:** Are the results consistent?
• **Actionable:** Do the results clearly tell you what students can or cannot do?
• **Triangulation:** Are there multiple lines of evidence for the same SLO?
• **Meaningful and engaging:** Are faculty engaged? Do students care?
• **Sustainable:** Can the process be managed effectively within the program context?
Direct measure examples

<table>
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<th>SLO</th>
<th>PO</th>
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<tr>
<td>Exam/Quiz</td>
<td>Quantity &amp; quality of service</td>
</tr>
<tr>
<td>Paper/Presentation</td>
<td>Completion/Usage/Error rate</td>
</tr>
<tr>
<td>Project/Portfolio</td>
<td>Analysis of processing time</td>
</tr>
<tr>
<td>Recital/Exhibition</td>
<td>Needs analysis/Gap analysis</td>
</tr>
<tr>
<td>Peer evaluation</td>
<td>Customer/Supervisor evaluation</td>
</tr>
</tbody>
</table>
Indirect measure examples

**SLO**
- Self-reflection essay
- Self-report survey
- Interview
- Focus group
- Report by alumni, employer, etc.

**PO**
- Customer survey**
- Interview
- Focus group
- Comparison to best practices in the profession

**Surveys are not always indirect assessment**

Direct evidence helps tell us “what”, and indirect evidence helps tell us “why”.
Triangulating direct and indirect measures

**Career Center:**

**SLO:** Students demonstrate professionalism in the job seeking process

**DIRECT**
- Scenario-based exam questions
- Rubric scoring of job seeking materials
- Interviewer/employer evaluation

**INDIRECT**
- Self-assessment survey
- Graduate survey
- Alumni interview
Triangulating direct and indirect measures

Center for Scholars:
PO: McNair Scholars are provided with step-by-step guidance to transition into graduate school.

DIRECT
- # of guidance or advising sessions provided per student
- % of students successfully transitioned into graduate school
- Student survey on quality of service provided

INDIRECT
- Survey of graduate school admission officers
- Comparison of successful transition rate with peer institutions
Triangulating direct and indirect measures

**Office of Assessment:**

**SLO:** Student Assessment Scholars can apply basic research skills to carry out learning assessment activities.

**DIRECT**
- Exam questions on relevant research skills
- Final project (paper/presentation)
- Department (i.e. client) evaluation
- Peer evaluation

**INDIRECT**
- End-of-program survey on self-perceived skills
- Self reflection essay
- Focus group
Case Study: Step 2
What are rubrics

• Scoring guides that explicitly classify learning products/behaviors into categories that vary along a continuum.

• No one format - Flexible!

Basic elements:
Step 3: Determine criteria for success

• A performance standard:
  • What level of performance is good enough?
  • Pre-determined!
  • Supported by historical data, reasonable expectations, theoretical frameworks...
# Criteria for success examples*

<table>
<thead>
<tr>
<th>Program/Unit</th>
<th>PO</th>
<th>Measures</th>
<th>Criteria of success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Center</td>
<td>Students demonstrate professionalism in the job seeking process</td>
<td>- Rubric scoring of job seeking materials</td>
<td>- 75% of students received a score of “adequate” or higher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Student self-assessment survey</td>
<td>- 90% of students self-report as “confident” in demonstrating professionalism</td>
</tr>
<tr>
<td>Center for Scholars</td>
<td>McNair Scholars are provided with step-by-step guidance to transition into graduate school.</td>
<td>- % of students successfully transition into graduate school</td>
<td>- 95% of students successfully transition to graduate school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Comparison of successful transition rate with peer institutions</td>
<td>- Success rate higher than the average of fellow CSUs</td>
</tr>
<tr>
<td>OAIE</td>
<td>Student Assessment Scholars can apply basic research skills to carry out learning assessment activities.</td>
<td>- Department (i.e client) evaluation</td>
<td>- Student scholars on average receive 3.5 or higher (out of 5) evaluation score from the departments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Focus group</td>
<td>- Focus group participants express consensus that the Student Assessment Scholars have the necessary research skills</td>
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*Suggested, not actual, outcomes*
Case Study: Step 3
Step 4: Collect and analyze data

• **Sampling!**
  • Relevant, Representative, and Reasonably sized
  • **Determined by the outcome and unit context**
  • Moderate sample size is sufficient (e.g. “50-80” rule; 20-30%).
    • Very large sample size is rarely needed.
    • If homogenous population, small samples are sufficient.
Case Study: Step 4
Step 5: Plan and execute improvement actions

• Review the assessment findings

• Determine plan for change (if needed)

<table>
<thead>
<tr>
<th>Possible Changes for SLO</th>
<th>Possible Changes for PO</th>
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<tbody>
<tr>
<td>Curriculum</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>Program design</td>
</tr>
<tr>
<td>Faculty support</td>
<td>Service delivery</td>
</tr>
<tr>
<td>Student support</td>
<td>Tools used</td>
</tr>
<tr>
<td>Resource</td>
<td></td>
</tr>
<tr>
<td>Assessment plan</td>
<td></td>
</tr>
<tr>
<td>More data collection?</td>
<td></td>
</tr>
</tbody>
</table>

• Don’t forget to re-assess the improvement actions!
Improvement actions example 1

• Associated Students, Inc.:

  • Student employees reported significant growth in oral communication skills, but not in written communication. Supervisor evaluation of student skills do not support students’ positive self-report.

  • Unit will 1) develop plans to investigate possible areas of improvement for student oral communication development; 2) review the nature of student employee positions; 3) adjust the outcome to truly reflect the skills applicable to student employee positions.
Improvement actions example 2

- Disability Support Services:

  - In the new student orientation survey, over 80% of students expressed satisfaction of the overall quality of the orientation; over 80% of students indicated that they knew how to access DSS services.
  - Data exceeded the criteria of success - outcome met

  - *Unit will 1) review open-ended questions on the survey to identify specific ways to further improve the orientation program; 2) develop a direct assessment measure; 3) attend a disability related assessment conference to improve assessment plan.*
Improvement actions example 3

• Business Communication

• Student writings of a case analysis were graded using the CLASS rubric, and found that students had the greatest deficiencies in “Strategy”.

• Program 1) collected additional demographic data to narrow down weakness population; 2) offered faculty development workshop on case analysis; 3) emphasized use of topic sentences and supporting evidence; 4) provided sample professional documents for use in classroom and homework exercises.

• Writing communication scores improved 17% between 2009 and 2012
Step 6: Document assessment activities

Tell a coherent story

Weigh the pig AGAIN
Case Study: Step 5 & 6
A multi-year assessment plan

• What to plan for:
  • Timeline
  • Process
  • Participants
  • Steps to turn assessment results into improvement actions
  • Self-evaluation/Reflection of the assessment process
A multi-year assessment plan (cont.)

• **Guidelines:**
  
  • Start with a small number of outcomes
  
  • Determine a realistic assessment plan cycle, i.e. how long (e.g. 7 years) to complete meaningful assessment of all outcomes
  
  • Create a multi-year assessment plan that assesses 1-2 outcomes a year
  
  • Consider overlapping assessment (of new outcomes) and improvement (of assessed outcomes) activities
  
  • Make sure assessment involves the entire unit

Outcome is not for only 1 year
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