Six-Step Assessment Process

Library

Office of Assessment and Educational Effectiveness
10.19.15
Assessment is a priority in our Strategic Plan

**Goal:** Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs.

**Objective:** Implement a sustainable university-wide assessment process that includes curricular and co-curricular components.

**Strategies:** Execute an assessment process that builds upon existing efforts, incorporates recently approved University Learning Outcomes, provides resources and training, supports program accreditation and emphasizes the use of assessment to improve student learning.
Why do assessment...really

• To confirm, diagnose, and IMPROVE

• To inform decision-making

• To demonstrate effectiveness

• To support accountability/compliance requirements
Assessment ≠ Evaluation

to inquire, demonstrate, and improve student learning or unit performance

to determine the merit, value and worth of someone or something
## Assessment ≠ Evaluation

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Formative/Ongoing</td>
<td>• Summative/Periodical</td>
</tr>
<tr>
<td>(Outcome does not change annually)</td>
<td>(Goals or criteria change annually)</td>
</tr>
<tr>
<td>• Output-focused</td>
<td>• Input-oriented</td>
</tr>
<tr>
<td>(What impact have we made)</td>
<td>(What we have done)</td>
</tr>
<tr>
<td>• Absolute</td>
<td>• Comparative</td>
</tr>
<tr>
<td>(Aim for ideal outcomes)</td>
<td>(Good vs. Bad)</td>
</tr>
<tr>
<td>• Improvement-oriented</td>
<td>• Judgment-oriented</td>
</tr>
<tr>
<td>(What can we do to improve)</td>
<td>(Reward or Punish)</td>
</tr>
<tr>
<td>• Reflective</td>
<td>• Prescriptive</td>
</tr>
<tr>
<td>(Every step is internally defined)</td>
<td>(Criteria are externally imposed)</td>
</tr>
<tr>
<td>• Flexible</td>
<td>• Fixed</td>
</tr>
<tr>
<td>(Every step can be adjusted)</td>
<td>(Process cannot be changed easily)</td>
</tr>
<tr>
<td>• Collaborative</td>
<td>• Competitive</td>
</tr>
<tr>
<td>(Team effort)</td>
<td>(Focused on individual)</td>
</tr>
</tbody>
</table>
“Assessment shall be intentional, ongoing, timely, student-centered, program-controlled, collegial, respectful of diversity and academic freedom, integrated, and institutionally supported.”

(UPS 300.022)

Same principle applies to non-instructional units
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

Identify
Methods & Measures

Plan & Execute
Improvement Actions

Determine
Criteria for Success

Collect & Analyze
Data

How are we doing?
How do we know?

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

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

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

What changes are we making?
Are the changes working?

*AECC Spring 2014
Outcome Statement

**SLO** vs. **PO**

* • Significant and essential learning that students achieve at the end of a course or program
  • Knowledge; Skill; Attitude

* • Measurable end results or consequences of activities, services, or program
  • Variety of results

*SLO or PO?*

*Depends on the nature of the outcome, not the function of the unit*
Where do we carry out assessment

*University*

*Division*

*Unit*

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**University Learning Goals**

**Strategic Plan Goals**

**Alignment**

**Division POs**

**Unit POs**

Determined by the Division
Step 1: Develop outcomes

Student Learning Outcomes (SLOs):

Significant and essential learning that students achieve at the end of a program

• Knowledge
• Skill
• Attitude

Performance Outcomes (POs):

• Measurable end results or consequences of activities, services, or program
• Variety of results
Where do outcomes come from

University

Division

Unit

Stakeholders

Alignment

University Mission/Strategic Goals

Division Mission/Strategic Goals

Unit POs

Opinions & Feedback
Mission...Goals...Outcomes... What else??

<table>
<thead>
<tr>
<th>Mission</th>
<th>Vision; Values; Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
<td>Broad statement of general aims or purpose; Division/Unit centered</td>
</tr>
<tr>
<td>Outcome</td>
<td>Specific and precise operational definition of goals; Customer/Beneficiary centered</td>
</tr>
</tbody>
</table>
Sound outcomes are...

• Customer/Beneficiary centered, not division/unit centered

• Aligned with division/university goals and missions

• Specific, clear and concise

• Measurable

• Discrete (no “double-barrel” statements)

• Manageable
# Bloom’s Taxonomy: Active verbs

<table>
<thead>
<tr>
<th>REVISED VERSION (Anderson &amp; Krathwohl, 2001)</th>
<th>EXAMPLE ACTIVE VERBS</th>
<th>ORIGINAL VERSION (Bloom, 1956)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating</td>
<td>Designing, constructing, planning, producing, inventing</td>
<td>Evaluation</td>
</tr>
<tr>
<td>Evaluating</td>
<td>Experimenting, checking, hypothesizing, critiquing, justifying</td>
<td>Synthesis</td>
</tr>
<tr>
<td>Analyzing</td>
<td>Comparing, organizing, deconstructing, interrogating, finding</td>
<td>Analysis</td>
</tr>
<tr>
<td>Applying</td>
<td>Implementing, carrying out, using, executing, transferring</td>
<td>Application</td>
</tr>
<tr>
<td>Understanding</td>
<td>Interpreting, summarizing, paraphrasing, classifying, explaining</td>
<td>Comprehension</td>
</tr>
<tr>
<td>Remembering</td>
<td>Recognizing, listing, describing, retrieving, naming, finding</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>

**For SLOs:**
Concrete student performance or behavior that you can observe and measure

**For POs:**
Concrete unit impact that you can observe and measure
## SLO/PO examples

<table>
<thead>
<tr>
<th>Outcome Type</th>
<th>ULG or SPG</th>
<th>Outcome</th>
<th>Division/Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO</td>
<td>Critical thinking (ULG 2)</td>
<td>Apply mathematics, chemistry, biology and/or physics to help clarify the mechanism behind major geological systems.</td>
<td>Geology, B.A.</td>
</tr>
<tr>
<td>SLO</td>
<td>Communication (ULG 3)</td>
<td>Communicate interpretations and conceptualizations of theatrical material orally, in writing, and through performance or other means of artistic expression.</td>
<td>Theatre Arts, B.A.</td>
</tr>
<tr>
<td>PO</td>
<td>Persistence, graduation rates, and narrowing achievement gap (SPG 2)</td>
<td>McNair Scholars will receive services that support Scholars in successfully graduating and progressing onto graduate school.</td>
<td>Educational Partnerships (Student Affairs unit)</td>
</tr>
<tr>
<td>PO</td>
<td>Resource development (SPG 4)</td>
<td>University stakeholders receive timely and effective communications about the university and graduates’ impact on and value to our region, state, and global community.*</td>
<td>University Advancement (UA division)</td>
</tr>
</tbody>
</table>

*Suggested, not actual, outcomes of the division/unit*
<table>
<thead>
<tr>
<th>Outcome Type</th>
<th>ULG or SPG</th>
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<tr>
<td>SLO</td>
<td>Intellectual literacy (ULG 1)</td>
<td>Students are able to identify and use information sources (e.g. database) to support disciplinary research projects.</td>
</tr>
<tr>
<td>PO</td>
<td>Curricular and co-curricular environment (SPG 1)</td>
<td>Students are provided with an adequate and updated inventory of physical and electronic materials.</td>
</tr>
<tr>
<td>PO</td>
<td>Curricular and co-curricular environment (SPG 1)</td>
<td>The university community receives timely and effective communications about library events, progress, and development.</td>
</tr>
<tr>
<td>PO</td>
<td>High-quality faculty and staff (SPG 3)</td>
<td>The library staff are provided with professional development opportunities to enhance engagement and promote career advancement.</td>
</tr>
</tbody>
</table>

*Suggested, not actual, outcomes of the division/unit*
### Step 2: Identify methods and measures

<table>
<thead>
<tr>
<th>Direct</th>
<th>vs.</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value-added</td>
<td>vs.</td>
<td>Absolute</td>
</tr>
<tr>
<td>Embedded</td>
<td>vs.</td>
<td>“Add-on”/External</td>
</tr>
<tr>
<td>Formative</td>
<td>vs.</td>
<td>Summative</td>
</tr>
</tbody>
</table>
Choosing the right methods

- Address the PO
- Valid
- Reliable
- Actionable
- Sustainable
- Start simple
- Prioritize embedded measures
- Use multiple methods
- Meaningful and engaging to stakeholders

Focus on “what we want to measure,” not “what existing measure we have”
## Direct assessment: Ideas

**SLO**
- Exam/Quiz: Embedded or external
- Course assignment
- Paper/Presentation
- Project/Portfolio
- Recital/Exhibition
- Peer evaluation

**PO**
- Quantity and quality of service provided
- Completion/usage rate
- Analysis of error rates
- Analysis of processing time
- Needs analysis/Gap analysis
- Customer/Supervisor evaluation
## Direct assessment examples

<table>
<thead>
<tr>
<th>Outcome Type</th>
<th>Division/Unit</th>
<th>Outcome</th>
<th>Direct measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO</td>
<td>Communications, B.A.</td>
<td>Demonstrate effective use of communication tools and technologies appropriate to the entry level of professional practice</td>
<td>Student performance in common portfolio assignments in upper-division courses</td>
</tr>
<tr>
<td>SLO</td>
<td>Library</td>
<td>Students are able to identify and use information sources (e.g. database) to support disciplinary research projects.*</td>
<td>Student reference use in a research paper</td>
</tr>
<tr>
<td>PO</td>
<td>OAEE</td>
<td>The university utilizes a centralized and standardized assessment management system</td>
<td>Calculate Compliance Assist Utilization Rate</td>
</tr>
<tr>
<td>PO</td>
<td>Educational Partnership</td>
<td>McNair Scholars will receive services that support Scholars in successfully graduating and progressing onto graduate school.</td>
<td>Track graduate school enrollment rate through a national clearing house</td>
</tr>
<tr>
<td>PO</td>
<td>Library</td>
<td>The library staff are provided with professional development opportunities to enhance engagement and promote career advancement.*</td>
<td>• Document the number of professional development opportunities provides&lt;br&gt;• Calculate the participation rate of staff in professional development opportunities</td>
</tr>
</tbody>
</table>

*Suggested, not actual, outcomes of the division/unit*
## Indirect assessment: Ideas

<table>
<thead>
<tr>
<th>SLO</th>
<th>PO</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Self-reflection essay</td>
<td>• Customer survey**</td>
</tr>
<tr>
<td>• Survey**: Homegrown or published</td>
<td>• Interview: Individual or group</td>
</tr>
<tr>
<td>• Interview: Individual or group</td>
<td>• Focus group: Structured or unstructured</td>
</tr>
<tr>
<td>• Focus group: Structured or unstructured</td>
<td>• Comparisons to best practices in the profession</td>
</tr>
</tbody>
</table>

**Surveys are not always indirect assessment**
# Indirect assessment examples

<table>
<thead>
<tr>
<th>Outcome Type</th>
<th>Division/Unit</th>
<th>Outcome</th>
<th>Direct measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO</td>
<td>Nursing, B.S.</td>
<td>Ability to provide evidence-based practice to patients</td>
<td>Student self-assessment survey at baseline, mid-program, and graduation</td>
</tr>
<tr>
<td>SLO</td>
<td>Library</td>
<td>Students are able to identify and use information sources (e.g. database) to support disciplinary research projects.*</td>
<td>Student end-of-course self-reflection of areas of learning</td>
</tr>
<tr>
<td>PO</td>
<td>OAEE</td>
<td>The university utilizes a centralized and standardized assessment management system</td>
<td>Conduct focus group to capture Compliance Assist user satisfaction</td>
</tr>
<tr>
<td>PO</td>
<td>Student Life and Leadership</td>
<td>Students will receive quality online services from the student engagement office</td>
<td>Student satisfaction survey with the services provided</td>
</tr>
<tr>
<td>PO</td>
<td>Library</td>
<td>The library staff are provided with professional development opportunities to enhance engagement and promote career advancement.*</td>
<td>Conduct annual climate survey to identify strengths and weaknesses related to staff retention and engagement</td>
</tr>
</tbody>
</table>

*Suggested, not actual, outcomes of the division/unit*
## Where to document the “things we do” : Step 2

<table>
<thead>
<tr>
<th>OAEE example</th>
<th>Library example</th>
<th>UEE/IPGE example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1: Outcomes</strong></td>
<td>The university utilizes a centralized and standardized assessment management system</td>
<td>Library staff will be provided with professional development opportunities to enhance engagement and promote career advancement.*</td>
</tr>
<tr>
<td><strong>Step 2: Methods and Measures</strong></td>
<td>- OAEE will design and improve the Compliance Assist system</td>
<td>- Monitor Library climate, and trends in staff retention and engagement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide training programs and other professional development opportunities to all staff</td>
</tr>
<tr>
<td></td>
<td>- Calculate Compliance Assist Utilization Rate</td>
<td>- Conduct annual climate survey to identify strengths and weaknesses related to staff retention and engagement</td>
</tr>
<tr>
<td></td>
<td>- Conduct Focus group to capture Compliance Assist user satisfaction</td>
<td>- Document the number of professional development opportunities provides</td>
</tr>
</tbody>
</table>

*“Things we do”*

**“Data we collect”**

*Suggested, not actual, outcomes of the division/unit*
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...
<table>
<thead>
<tr>
<th>Division/Unit</th>
<th>SLO/PO</th>
<th>Measures</th>
<th>Criteria for success</th>
</tr>
</thead>
</table>
| OAEE | The university utilizes a centralized and standardized assessment management system | - Calculate Compliance Assist Utilization Rate  
- Conduct Focus group to capture Compliance Assist user satisfaction | - 80% Compliance Assist utilization rate  
- Focus group participants describe Compliance Assist as an effective tool |
| Library | Students are able to identify and use information sources (e.g. database) to support disciplinary research projects.* | - Student reference use in a research paper  
- Student end-of-course self-reflection of areas of learning | - 70% of students will receive a “meets expectations” or “exceeds expectations” using the grading rubric focused on reference use  
- 90% of students reported self-perceived growth in their ability to use databases to locate needed information. |
| Library | Library staff are provided with professional development opportunities to enhance engagement and promote career advancement.* | - Document the number of professional development opportunities provided  
- Calculate the participation rate of staff in professional development opportunities | - 90% of staff participate in at least 1 professional development opportunity per year  
- 80% of survey respondents report to be “satisfied” with the library climate |

*Suggested, not actual, outcomes of the division/unit
Step 4: Collect and analyze data

- Sampling, sampling, sampling!
  - Relevant
  - Representative
  - Reasonably sized

Determined by outcome, unit circumstances
Step 5: Plan and execute improvement actions

• Review assessment findings

• Types of changes:
  • Infrastructure
  • Program design
  • Service delivery
  • Tools used
  • Resources
  • Assessment plan

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

NILOA (2014)
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

• History, B.A.:

  • Student final research papers produced in HIST 490T (senior capstone) were found to be weakest in their analytical clarity.

  • Department 1) made 300A a prerequisite for students taking 490T so that students in 490T have a better grounding in appropriate analytical frameworks; 2) created a 499 Student Mentorship in History in which capable and dedicated undergraduate students were trained in how to teach basic historical skills like thesis writing, research, historiography, and editing. These students ran workshops and were deployed to work with particular HIST 300B courses.
Improve actions example 4

- **Business Communication (SLO)**
  
  - 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
A multi-year assessment plan

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

• Guidelines:
  
  • Limit to 5-7 POs
  
  • Determine a realistic assessment plan cycle, i.e. how long (e.g. 5 years) to complete meaningful assessment of all POs
  
  • Create a multi-year assessment plan that assesses at least 1 PO a year, or follow division’s guidelines
  
  • Make sure assessment is carried out by the entire division/unit
  
  • Make sure the assessment plan is manageable and sustainable over time

Outcome is not for only 1 year
assessment@fullerton.edu

www.fullerton.edu/assessment