



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

Assessment: Basics

10.30.19



Assessment is a big focus for WSCUC



Areas of Concern:

- Integrated strategic plan
- Assessment
- Student success
- Funding



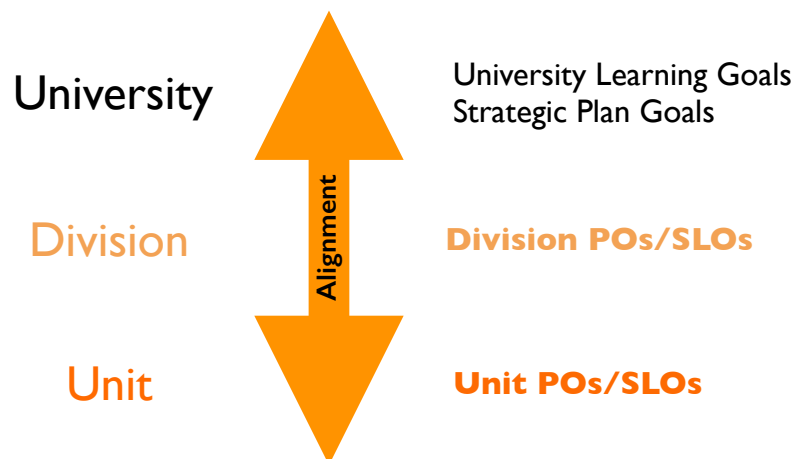
Assessment is more than accreditation

“Without data, you are just another person with an opinion.”

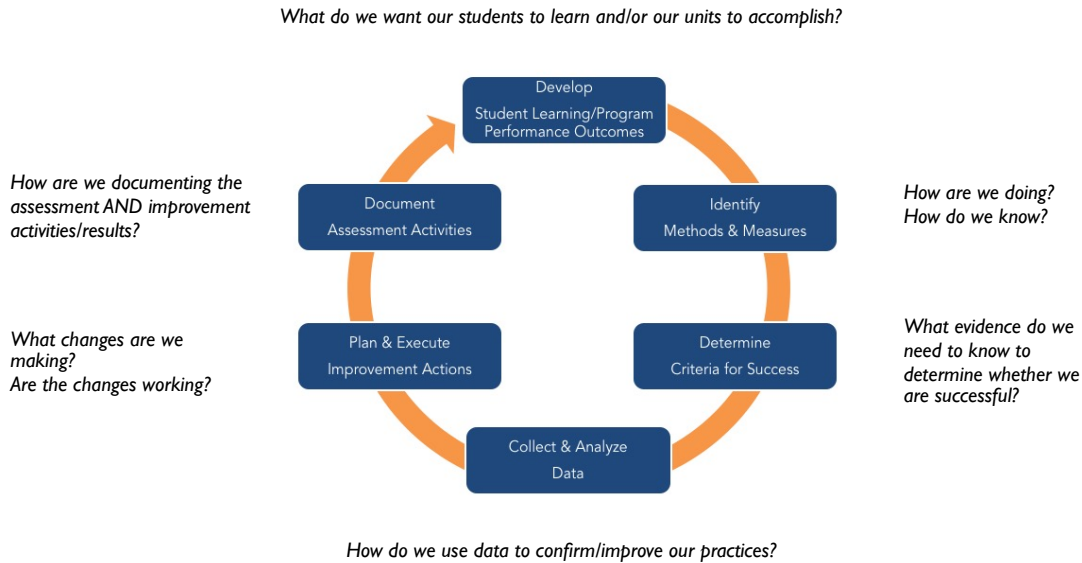
– W. Edwards Deming

- **To confirm, diagnose, and IMPROVE**
- To inform decision-making
- To demonstrate effectiveness
- To support accountability/compliance requirements

Where do we carry out assessment



Six-step assessment process*



*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

University

Division

Unit

Alignment

- “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...Objectives...

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



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

Outcome examples*

Unit	PO	SLO
Career Center	Students receive adequate support and feedback on their job seeking effort.	Students demonstrate professionalism in the job seeking process.
Center for Scholars	McNair Scholars are provided with step-by-step guidance to transition into graduate school.	McNair Scholars can identify necessary steps for a successful transition into graduate school.
Office of Assessment	Student Assessment Scholars will receive high quality training to carry out learning assessment activities.	Student Assessment Scholars can apply basic research skills to carry out learning assessment activities.

**Suggested, not actual, outcomes*

Case Study: Step I



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

Direct	vs.	Indirect
Value-added	vs.	Absolute
Embedded	vs.	“Add-on”/ External



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

SLO

- Exam/Quiz
- Paper/Presentation
- Project/Portfolio
- Recital/Exhibition
- Peer evaluation

PO

- Quantity & quality of service
- Completion/Usage/Error rate
- Analysis of processing time
- Needs analysis/Gap analysis
- Customer/Supervisor evaluation



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

Use as supplemental evidence

**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:

Criteria	Performance Levels			
	Capstone 4	Milestones 3 2		Benchmark 1
Explanation of issues	Issue/problem to be considered critically is stated clearly and described comprehensively delivering all relevant information necessary for full understanding.	Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions.	Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguous, unexplained, boundaries undetermined, and/or backgrounds unknown.	Issue/problem to be considered critically is stated without clarification or description.
Evidence <i>Taking and using information to investigate a point of view or conclusion</i>	Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.	Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis.	Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis.	Information is taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question.
Influence of context and assumptions	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of context when presenting a position.	Is s f		Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
Student's position (perspective, thesis/hypothesis)	Specific position (perspective, thesis/hypothesis) is imaginative taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).	Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/hypothesis).	Specific position (perspective, thesis/hypothesis) acknowledges different sides of an issue.	Specific position (perspective, thesis/hypothesis) is stated, but is simplistic and obvious.
Conclusions and related outcomes (implications and consequences)	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.	Conclusion is logically tied to a range of information, including opposing viewpoints, related outcomes (consequences and implications) are identified clearly.	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion), some related outcomes (consequences and implications) are identified clearly.	Conclusion is incoherently tied to some of the information discussed, related outcomes (consequences and implications) are oversimplified.

Detailed performance description



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*

Program /Unit	PO	Measures	Criteria of success
Career Center	Students demonstrate professionalism in the job seeking process	<ul style="list-style-type: none"> - Rubric scoring of job seeking materials - Student self-assessment survey 	<ul style="list-style-type: none"> - 75% of students received a score of "adequate" or higher - 90% of students self-report as "confident" in demonstrating professionalism
Center for Scholars	McNair Scholars are provided with step-by-step guidance to transition into graduate school.	<ul style="list-style-type: none"> - % of students successfully transition into graduate school - Comparison of successful transition rate with peer institutions 	<ul style="list-style-type: none"> - 95% of students successfully transition to graduate school - Success rate higher than the average of fellow CSUs
Office of Assessment	Student Assessment Scholars can apply basic research skills to carry out learning assessment activities.	<ul style="list-style-type: none"> - Department (i.e client) evaluation - Focus group 	<ul style="list-style-type: none"> - Student scholars on average receive 3.5 or higher (out of 5) evaluation score from the departments - Focus group participants express consensus that the Student Assessment Scholars have the necessary research skills

*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)

Small changes matter

Possible Changes for SLO	Possible Changes for PO
<ul style="list-style-type: none"> • Curriculum • Pedagogy • Faculty support • Student support 	<ul style="list-style-type: none"> • Infrastructure • Program design • Service delivery • Tools used
<ul style="list-style-type: none"> • Resources • Assessment plan • More data collection? 	

- Don't forget to re-assess the improvement actions!

Weigh the pig

Feed the pig

Weigh the pig

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

- **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

Nuventive Improve AA - Assessment and Institutional Effectiveness

AA - Assessment and Institutional Effectiveness > Home

Unit Planning Summary

	Outcomes (Step 1)	Methods and Measures (Step 2)	Data Collection and Analysis (Step 4)	Improvement Actions (Step 5)
✓ PO-01: Sustainable university-wide assessment process		1	1	1
✓ PO-02: Assessment training and professional development		1	1	1
✓ PO-03: External compliance support		1	1	1
✓ PO-04: Analytical Studies support		1	1	1
✓ PO-05: Institutional Research		1	1	1
✓ PO-06: Quality Assurance		1	1	1
✓ PO-07: Data Governance		1	0	0
✓ PO-08: Assessment and QA dissemination		1	1	1

New
AMS in 2019

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:**

Outcome is not
for only 1 year

- 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

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