Program Assessment Glossary

This document will provide you with an understanding of the basic assessment terminology as applied in our documents in the College of Arts and Sciences at USD.

1. Program/Core Goals: Goals are broad expectations for students learning in your program or across the core curriculum. Examples may include goals such as discipline-based knowledge, critical thinking, quantitative literacy, and written and/or oral communication. These are not usually stated as outcomes, but serve as a way of categorizing knowledge, skills, values, and behavior that we expect students to acquire in academic programs. When thinking broadly about what you expect students to learn when they graduate from your program, you will be focusing on program-level goals (as opposed to institutional-level or course-level goals). If program outcomes are unknown to you, you can consult your department chair or your department webpages where they are published for every department in the College of Arts and Sciences. You can find the institutional-level goals and outcomes for the core curriculum at: http://www.sandiego.edu/core/uggoals.php.

2. Student Learning Outcomes (SLOs): Learning outcomes can be derived by considering what kinds of understandings, abilities, dispositions, habits of mind, ways of thinking, and problem solving you believe students should achieve by the time they graduate from your program. For example, critical thinking might be translated into the following outcomes: Students will approach an issue from multiple perspectives; they will make claims or arguments based on evidence, information, or research; they will compare and contrast course readings with their community service learning experiences (Driscoll & Swarup, 2007, p. 54). At Indiana State, the mathematics department identified one program goal as "understanding the nature of truth and the concept of proof in the discipline of mathematics." With this goal, they identified three outcomes: 1) Students will be able to construct and write proofs for mathematical assertions, using a variety of methods, 2) Students will be able to disprove mathematical assertions, by constructing counterexamples, and 3) Students will independently read mathematical arguments, and be able to judge their validity. The sample assessment report from WAZU University illustrates how program goals were translated into outcomes assessed in two different levels (100 and 300) of courses.

A word about outcomes: Outcomes are actions taken by students at various levels of learning. The matrix below identifies these at various levels from lower to higher.

Level	Type of Activity or Question	Verbs Used for Outcomes
Lowest level	Knowledge	define, memorize, repeat, match, record, list, recall, name, relate, collect, label, specify, cite, enumerate, recite, tell, recount
	Comprehension	restate, summarize, differentiate, discuss, describe, recognize, explain, express, identify, locate, report, retell, review, translate, paraphrase

	Application	exhibit, solve, manipulate, interview, simulate, apply, employ, use, demonstrate, dramatize, practice, illustrate, operate, calculate, show, experiment
Higher levels	Analysis	interpret, classify, analyze, arrange, differentiate, group, compare, organize, contrast, examine, scrutinize, survey, categorize, dissect, probe, create an inventory, investigate, question, discover, inquire, distinguish, detect, diagram, chart, inspect
	Synthesis	compose, set up, plan, prepare, propose, imagine, produce, hypothesize, invent, incorporate, develop, generalize, design, originate, formulate, predict, arrange, assemble, construct, create
	Evaluation	judge, assess, decide, measure, appraise, estimate, evaluate, rate, deduce, compare, score, value, predict, revise, choose, conclude, recommend, determine, criticize, test

Program outcomes should reflect what students are learning by the time that they graduate from your program. Ideally, they reflect the "higher order" knowledge, skills, values, and performance expected by students who have mastered an undergraduate education in your discipline. One of the program goals may be, for example, "inquiry and analysis," and your outcome might be: the student will become familiar with existing literature on the topic, form a research question, collect and evaluate data. It is also helpful to think about how outcomes will be applied across the various levels of your curriculum. What do you expect students to be able to accomplish when they are first introduced to your outcomes in 100- or 200-level courses? How do these change as students develop their knowledge, skills, etc. in 300- and 400-level courses? Finally, what would you like to see them be able to do in their capstone courses?

Finally, it is very important to distinguish between program-level outcomes and course-level outcomes. Course outcomes are specific learning goals associated with a particular course (see Course Assessment Basics on the CAS Assessment website.

Here's an example based on Psychology Department at University of Nevada at Reno:

> **Program goal:** Acquire discipline-based knowledge.
>
> **Program outcome:** Students should be able to: understand and explain major theories in psychology in the following areas: physiology of the brain and nervous system, cognition, learning, child psychology, abnormal psychology, and animal behavior
>
> **Course objective:** Students will be able to describe key principles of the major stimulus-response theories and their respective applications in educational and therapeutic settings, and will be able to site relevant research to support their positions.

You may be in the process of working on these three levels: goals, outcomes, and course objectives. Translating goals to program outcomes and aligning program outcomes to course outcomes are processes we will continue to refine. You can read more about it here:

Driscoll, A., & Wood, S. (2007). *Outcomes-based assessment for learner-centered education: A faculty introduction.* Sterling, VA: Stylus.

4. Course Alignment or Curricular Mapping: The next step in assessment is to decide how your program outcomes are distributed across your curriculum. You can use a grid or matrix to illustrate the distribution. You should also indicate where outcomes are introduced, developed and mastered in your curriculum. A cohesive curriculum means that every outcome is aligned with at least one course in your curriculum. It also means ideally that you sequence introductory levels at the beginning, and then give students ample time to develop and master the knowledge, skills, values, and behaviors you expect them to achieve when they complete your program.

5. Assessment Activity Matrix or Rubric: Many programs use this type of organizing device to identify and describe all forms of direct and indirect evidence collected annually (see the matrix below as an example). It should help you identify all methods for evaluating evidence, such as any rubrics or scoring systems used in the evaluation process. Evidence must include direct forms of evidence and may include indirect forms of evidence (see handouts posted on the CAS Assessment webpage on Direct Assessment Methods and Indirect Assessment Methods.

Direct Evidence	LO1	LO2	LO3	LO4	LO5	LO6	LO8
1. Assessment of 300 Level Exams	X	X	X	X	X		
2. Assessment of 300 Level History Essay				X		X	
3. Assessment of Historians' Methods Research Paper				X	X		X
Indirect Evidence							
4. Senior Exit Survey	X	X	X	X	X		
5. Senior Focus Group				X	X		

6. Learning Outcome Rubrics: It is important to identify how the student work was evaluated. The simplest form is to find and use an existing rubric, or to create and use a rubric based on your existing grading criteria. The purpose of a rubric is to articulate how students will perform at various levels of learning related to the selected outcome. Rubrics can be modified to fit any outcome and relevant assignments, exams, capstone projects, etc. Each rubric specifies outcome dimensions and performance levels along these dimensions. There are many online resources for rubrics, including everything from constructing a rubric from scratch to directories of links to existing rubrics; here are a couple to explore:

http://www.winona.edu/AIR/rubrics.htm

http://business.fullerton.edu/centers/CollegeAssessmentCenter/RubricDirectory/other_rubrics.htm

The trick is to develop one that works specifically for your outcomes and assignments.

The alternatives to using rubrics generally include percentages of correct scores across multiple exam items, stand-alone external measures such as field tests in various disciplines, or independent measures such as Halpern's critical thinking inventory.

7. Timeline: The next assessment basic term is the "timeline" which identifies the time period your department has established for assessing your program outcomes. It should also identify key individuals or groups who will be involved in the assessment process either as instructors of targeted courses, assessment team members, or both. It should also indicate specific learning outcomes (LOs) examined in those courses collecting specified types of data samples.

Year	Three-Year Cycle Process	Key Persons	LOs 1-5	Courses	Data Outcomes
1	Initiation of process	Asmt Cmte	1,2	Identify courses	Identify data
	Collection	Profs A,B,C		100, 200, 300, 365	Reflection papers; research papers
	Analysis	Asmt Cmte			Results summarized and interpreted
	Reporting to Dept & Dean	Asmt Cmte			
2	Initiation of process	Asmt Cmte	3,4	Identify courses	Identify data
	Collection	Profs D, E, F		125, 350, 400	Exam answers; essays
	Analysis	Asmt Cmte			Results summarized and interpreted
	Reporting to Dept and Dean	Asmt Cmte			
3	Initiation of process	Asmt Cmte	5	Identify courses	Identify data
	Collection	Profs G,H,I		330, 336, 366W, 495W	Reflection papers; research papers; senior projects
	Analysis	Asmt Cmte			Results summarized and interpreted

	Reporting to Dept & Dean	Asmt Cmte			

8. Feedback: One of the most important aspects of effective assessment is ensuring that the results are interpreted and disseminated among the faculty. This is called “closing the feedback loop” in assessment. Analyses in their binders, ignored on their dusty shelves, are exercises in futility. Ideally, faculty are using evidence to answer specific curricular questions they might have, such as “Do 100-level courses provide students with the opportunities to learn skills they will need to apply at 200-, 300-, and 400-level courses?” “How is knowledge introduced, developed and mastered in our program?” When faculty begin assessment, they need to first become acquainted with the general assessment process. For some programs, the data they may have collected was insufficient to answer larger questions about learning. In ensuing semesters, faculty may address issues of representation, internal validity and consistency by collecting random samples across several sections of the same course with the same assignment, or benchmarking their results with external field tests or inventories.

The process may seem a little daunting at first. The College A-Team can assist you in any phase of this process, and you can watch for workshops on assessment offered by CEE.

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