

LEARNING ASSESSMENT BULLETIN

NEWS AND INFORMATION FROM THE
LANEY COLLEGE LEARNING ASSESSMENT COMMITTEE
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Outcomes vs. Objectives

There has been much confusion about the differences between outcomes (student learning outcomes or SLOs) and objectives. These terms have been used in different ways, so we need to define the terms clearly so that we all know what we're talking about when we have discussions on assessment topics. Before addressing the differences between outcomes and objectives, it's helpful to have an overall idea of the steps involved in assessing student learning. We can then see where outcomes fit into the entire process. Here is a brief description of the steps of assessment:

Steps in the Assessment Process

1. Decide what students should be able to **DO** at the end of your class. (Develop student learning outcomes.)
2. Provide opportunities for students to learn and get feedback on their work.
3. Collect evidence to see if students are actually able to do what you think they should be able to do.
4. Analyze the evidence, come up with a plan for improvement, and implement the plan.

The idea behind assessment is to focus on what the learner is able to **do** (rather than what the instructor covered) and to be en-

gaged in continuous questioning and improvement of student learning.

The very first step is to develop statements of **outcomes** for classes. These outcomes should be included in the syllabus for the class.

Objectives vs. Outcomes

The assessment movement is relatively new, and the vocabulary has not yet been standardized. The terms "objectives" or "learning objectives" have been used in a variety of different ways.

For our purposes, **objectives** represent the many types of things a student will learn in a class. Objectives are very content-specific, and there will be many objectives for each class. Objectives typically involve lower-order thinking skills and often don't require students to synthesize ideas. Objectives are definitely important, because in order to prepare students to do more complicated assignments, they have to first learn many skills and individual pieces of information. An example of an objective for a chemistry class might be: "Apply IUPAC nomenclature rules to name carbonyl compounds" or "Solve stoichiometry problems involving a limiting reactant". Notice that these objectives focus on individual skills. They are content-specific, and they don't require a synthesis of skills.

Want to learn more? Highly recommended: *Assessing Student Learning in Community Colleges* (2004) – an online course or downloadable workbook for various topics and hands-on work in assessment. <http://online.bakersfieldcollege.edu/courseassessment/>

Also check out the Learning Assessment Committee website:

[http://www.laney.peralta.edu/apps/comm.asp?\\$1=30343](http://www.laney.peralta.edu/apps/comm.asp?$1=30343)

To navigate to the LAC website from the Laney website, click on Office of Instruction: Shared Governance: Committees: Learning Assessment Committee

Come to our bi-monthly brown bag discussions on assessment!
Friendly, low-key, and informative.
Wednesday May 3 (12-1 pm in T-750) and Thursday May 11 (12-1 pm in T-450)

Outcomes (also known as student learning outcomes or SLOs), on the other hand, focus on big-picture concepts, skills, or attitudes. Outcomes state what a student will be able to do with all of their knowledge and skills at the end of the class (or program). SLOs use active verbs and they must be assessable. You might have 100 objectives for a particular class, but you should have only about 3-8 outcomes for the same class. Outcomes should be included on the syllabus for each class. Outcomes should incorporate any major, important assignments you always give. An example of an outcome for a chemistry class is: "Write clear, well-organized laboratory reports. Analyze the results of laboratory experiments and evaluate sources of experimental error."

Notice that this outcome requires much more than simple recall of facts, basic problem solving, or elementary explanations. This outcome involves students putting different ideas together, organizing their work clearly, and evaluating sources of error. In order to analyze their experimental results, students have to think about the procedure and why it was done the way it was done. Students also have to address any assumptions that were made in order to do the calculations, and they have to think of what types of common errors could have affected their results. All of this requires higher-order thinking skills.

This outcome is also assessable: in order to see whether students are really able to write clear, well-organized laboratory reports, one can collect a set of lab reports from the students and can then analyze how well students

were able to master each aspect of the assignment. One can assess the organization, clarity, calculations, evaluation of results, and any other desired aspects of the assignment. The information on how students did on each aspect of the assignment can be collected using a scoring sheet (rubric). The instructor can then analyze student results from the entire class, and can use this evidence to determine any problem areas (what aspects did many students have trouble with?) and to plan how to help students improve their performance.

The Learning Assessment Committee will be holding a workshop on how to write student learning outcomes on April 27 from 1-4 pm in room A266. The goal of the workshop is to have each participant or small departmental group write a complete set of SLOs for one class. Join us if you can, and bring at least one other member of your department.

Directions for how to write student learning outcomes can also be found on the [Assessing Student Learning](http://online.bakersfieldcollege.edu/courseassessment/) website from Bakersfield College:
<http://online.bakersfieldcollege.edu/courseassessment/>

Learning Assessment Committee Members: Linda Sanford, Cheli Fossum (co-chairs), Tracy Camp, Vina Cera, Jackie Graves, Evelyn Lord, Ann McMurdo, David Mitchell, Mae Frances Moore, Louis Quindlen, Karolyn van Putten, Ed Wright
Comments? Questions? Feedback? Send e-mail to mfossum@peralta.edu