Assessment at LMC: A Quick and Dirty Guide to Assessing Your Program-Level Student Learning Outcomes

All About PSLOs

PSLOs, or Program-Level Student Learning Outcomes, are descriptive statements of what a student should achieve upon exiting a program at Los Medanos College. PSLO assessment can provide valuable insight into the effectiveness of our college programs and how to best serve our students. For the purpose of learning outcome assessment at LMC, a program is defined as:

- A program of study leading to a degree
- A program of study leading to a state-approved certificate
- An organized service or sequence of courses leading to a defined objective

All programs thus defined have associated PSLOs. The outcomes for instructional programs can be found in the College Catalog, published yearly, in the Program Review Submission Tool (PRST), and in the Course Outline of Record (COOR) for those courses that map to programs. Current COORs can be found on the P Drive. The P Drive can be accessed from your campus computer or remotely using http://remote.losmedanos.edu. Log in with your Insite user name and password.

PSLOs are assessed once every 5 years at Los Medanos College in order to improve instruction and student support services. In year 5 of the assessment cycle, all instructional programs must assess all PSLOs. Student Service programs must assess PSLOs at least once in the 5-year cycle on a schedule that works best for the unit.

For more information on assessment background, timing, and additional resources at Los Medanos College, see The Teaching and Learning Committee’s documents and resources: http://www.losmedanos.edu/intra-out/tlp/resources.asp

How to Assess Your PSLOs

Step 1: Identify how you will assess each of your PSLOs and which student populations you will assess.

The assessment tool you choose will very much depend on the PSLO you are assessing. To what extent will the assessment tool you use offer authentic and meaningful data about the desired outcome? Outlining indicators of success and/or drafting a performance rubric with your program team ahead of time may help you narrow down which tool will work best for your program.

Choosing the appropriate student population in your program to assess will also depend largely on which PSLO you are assessing and what you want to know more about. You may find that assessing a subsample of students might allow for a deeper analysis of a particular PSLO.

Below are some examples of assessment tools that may be used to directly and/or indirectly monitor achievement of a particular outcome. Pairing a direct with an indirect tool will give you a deeper look into student learning associated with a particular PSLO.
Direct Assessment of Student Work
- Aggregation of CSLO data from multiple courses mapped to a PSLO
- Analysis of course-embedded projects across multiple courses mapped to a PSLO
- Capstone course projects
- Student portfolios
- Pre-/post-program exam questions or mock certification exam

Indirect Assessment of Student Work
- Student exit surveys: perception/satisfaction
- Analysis of program data: % students passing industry exam, attaining associate’s degree, gaining employment within X months of graduation
- Interviews
- Reflective writing
- Focus groups

Step 2: Plan and administer the assessment.

Decide when you will administer the assessment and how you will frame the assessment (what you will say to students before they complete the assessment). This is particularly important in multi-section courses to make sure all students are receiving the same instructions. Encouraging students to embrace and overcome challenges, providing opportunities for self-affirmation, reducing your use of jargon, and outlining clear expectations will enhance the effectiveness and equitable nature of the assessment.

You may wish to do a trial run of your assessment instructions and questions with a former student or colleague. This process only takes a few minutes and can help you identify any parts that may be unclear or misleading, giving you an opportunity to tweak language before giving the assessment to a large group of people.

Note on collecting student data using online survey tools:

If you are interested in using online surveys in your assessment, there are several websites that can help you, such as Surveymonkey (www.surveymonkey.com) and Google Forms (www.google.com/forms/about/). Both are free and allow you to generate a link that can be sent to your students.

Google Forms is easy to use and there is no limit to how many questions you put in your form. All respondents’ answers show up in a Google Sheet spreadsheet automatically. Google Forms is really more of a form builder than a survey tool, so you will end up with data and do the analysis on your own.

Surveymonkey and SurveyGizmo are both survey programs that crunch the data for you and allow you to view statistical reports. The downside is that these two programs have some restrictions (such as number of questions) in the free version.

Note on inherent biases in online survey tools:

The only downside to using any online survey program is the bias in the response sample. The students who respond to the survey might not be representative of the population as a whole (they might be only the highly motivated students in your
program, or those had a particularly negative or positive experience that’s not representative of everyone’s experiences). This is similar to Yelp reviews, as there are usually lots of five star responses, lots of one star responses, and very few middling reviews. You’ll have to frame your survey in a way to avoid these pitfalls, and understand that your responses might not be truly representative of the entire population.

Some ways to avoid these pitfalls and to encourage thoughtful responses include:

- Asking qualitative questions that require more reflection and deeper thought in addition to quantitative questions (such as Likert scales [1-5] or other rating)
- Providing labels for the points on the scale (e.g. Likert scale: N/A = Not applicable or No Opinion, 1 = strongly disagree, 2 = mildly disagree, 3 = no strong opinion, 4 = mildly agree, 5 = strongly agree)
- Breaking down questions into multiple parts (so a student doesn’t just give one rating to the class, but more granular ratings about different aspects of the class)

**Step 3: Analyze your results.**

Now that you have data, how you will analyze the data? Talk with your program team, if applicable, to get on the same page. Decide on benchmarks. Which level of work falls below expectations? Which meets expectations? Which exceeds expectations?

Below are examples of how you might systematically analyze your data:

- Rubrics – Outline performance criteria and levels of achievement/proficiency
- Pile sorting – Sort student work into piles based on prevalence of concept/term or level of achievement

**Sampling Techniques and Tips**

After you have decided on your benchmarks and/or rubrics, it comes time to actually evaluate the data to see how the students did in meeting those goals. You do not have to score or evaluate each student’s assessment, as you may have over 100 responses. Instead, you can pull from a random sample of 30-40 responses, and grade those. As long as the sample is random, and you choose at least 30 responses, then the results will be statistically significant and representative of the entire population that you are studying. While 30 responses are good, 40 are even better, as the presence of any outliers will have less of an effect on your results.

The easiest way to obtain a valid random sample is to use “stratified random sampling.” This is done by separating the assessments by class section, and then choosing every second (or third, or fourth, etc.) student’s response. For instance, if you have 120 responses from 4 different class sections, you can choose every fourth paper from each section, and you’ll have 30 responses in total to assess. The analysis you make on your random sample, as long as it’s 30 or more, will be valid for the population as a whole.

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Additional Data Requests

You may wish to access additional data (ex: agrees awarded) to answer your research question(s) and complete your analysis. There are a few places you can look to obtain this data (these are all available on the PRST under “Data Repository.”) Most can only be accessed from a computer on campus:

- Insite: SQL Server Reporting Services
- LMC Awarded Degrees and Certificates
- LMC Student Success Score Card
- CCC Chancellors Office MIS Data Mart

If these databases and reports do not have the information you need, contact the PSLO/CSLO Coordinator, as well as your dean with the specific information you’re looking for, and we will work with District Office of Research to help you.

Step 4: Discuss your results with your program team (or thought group).

What do your results tell you? What trends do you see? What questions do you wonder about as you look at your data? Generate findings, discuss trends, and record highlights of the discussion. How will the results of this assessment be used to improve student learning in the program? What is your plan of action? Who will be responsible for implementing the action plan, and what is your program team’s timeline?

If you are a single-faculty program, consider asking any adjuncts you might have to participate in assessment with you. If you are the only person in your program participating in PSLO assessment, consider getting together with another similar program to share/discuss your results and workshop solutions and strategies. If you have questions about whom you might collaborate with, check in with your dean.

Step 5: Report your results.

Using the assessment reporting template (found on the TLC website under Documents and Resources), document your PSLOs, assessment methods, findings, discussion highlights, action plan, and assessment summary. You do not have to use the provided assessment template for reporting purposes; you may use another of your choosing. For example, a written narrative report integrating the required information or a chart are both acceptable formats, as long as your report includes the required elements: PSLOs assessed, a description of your assessment method/tool, criteria for “High Proficiency” and “Meets Proficiency,” the number of students at each proficiency level, major findings from the assessment, an improvement plan, if needed, based on these findings, and a summary.

Once you have prepared your report, submit your completed form to the PRST (Program Review Submission Tool) Data Repository. (http://www.losmedanos.edu/planning/programreview.asp). Let your chair or dean know if you cannot access the PRST. To upload your report:

1. Choose the appropriate categories from the drop-down menus for your course and cohort year. For instance, “Instructional,” “English,” and “2016-2017.”
2. Click on “Assessment” on the left-hand menu and make sure the “Program Assessment” tab is selected.
3. Click on “Upload Report” next to the list of PSLOs to upload your report.

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4. Make sure after you upload that the report shows up in the Data Repository. You can toggle to this screen by clicking on “Data Repository” on left-hand side of page.
5. Notify your dean that you have successfully submitted your report.

See below screen shots for visual instructions.

Step 6: Revise your PSLOS.

Now that these findings are fresh in your mind, revise your PSLOS with your team. To what extent do these PSLOS still reflect what you wish students to learn upon exiting your program? What did students struggle with in your PSLO assessment process? How might you design experiences that prepare students for successful achievement of your PSLOS?

Include your action plan and revised PSLOS in your Comprehensive Program Review.

Step 7: Revise your COOR.

Incorporate your PSLO revisions to your COOR (Course Outline of Record) the next time you formally revise and submit your COOR to Curriculum Committee.

Step 8: Congratulate yourself!

Now, give yourself a big pat on the back! Reflecting on teaching and learning, particularly at the program-level, is not easy, yet provides such a valuable opportunity to think about how to best serve our students.