Report Format for PLO Assessment
Format Guidelines for PLO Reports Submitted in AY 2015-2016

Overview

_As in AY 2011-2012:_ Beginning with the AY 2011-2012 PLO Report submissions, SACAP is asking each program to review how the PLO under study aligns with the program's required and regularly taught elective courses. *Please be sure to briefly describe the alignment methods, results, and related conclusions in Sections III-V respectively of the PLO Report.*

> *Why***:** SACAP is encouraging this approach to curriculum review for two reasons.
>
> > 1) Program review will be more manageable as the work of developing "a tabular presentation of the alignment between the learning outcomes of core and elective courses and the program learning outcomes"[1] will be distributed over a number of years.
> >
> > 2) This analysis will provide information useful for interpreting the program's assessment results and for identifying possible responses for improving learning outcomes.
>
> *How***:** One approach is to ask the instructors of required and elective courses to identify 1) which, if any, of their course outcomes support student development of the PLO under review, and 2) the level at which the outcomes are developed in their course relative to the degree of mastery expected at graduation, for example, introductory, developing, or mastery. Also consider asking instructors to provide key assignments/assessments, and any associated rubrics, to gain a sense of how students develop and demonstrate the skills and knowledge described by the PLO. Collectively, this information can be used to update the program's curriculum map[2] in preparation for program review and to provide insight into the student performance strengths and weaknesses revealed by the examination of student work in relation to this PLO.

Purpose: This guide will help you to prepare the report that describes your program's assessment of its focus program learning outcome. Much like a professional journal article, *the content of the report should be focused by the assessment question the program pursued*. *As such, your report will only address a subset of the questions provided below: those that reflect the purpose(s) of the assessment work conducted.*

Audience: PLO reports are intended to provide a record of your program's planned evolution with respect to improving student learning as well as the program's ability to engage in effective, meaningful assessment. As such, please write these reports with your present and future colleagues in mind, aiming to document what your program has learned both about student learning and about the process of engaging in assessment in order to promote continued improvement in both of these areas. Your PLO report will also highlight any revision of your program's curriculum and specific evidence of student learning that prompted a change.

---

[1] p.9 of the Undergraduate Program Review Policy and Procedures.
[2] Available in the program's assessment plan.

Format Guidelines

I. Abstract (1 paragraph maximum)

Briefly summarize the question the program pursued, the methods, results, conclusions, recommendations and resource implications.

II. Introduction (1 page maximum)

Introduce readers to the program's goal(s). Briefly discuss how and why the Program Learning Outcome (PLO) was selected for review. What assessment question did the program pursue? Specifically, what did your faculty want to know and achieve?

III. Assessment Methods (2 pages maximum)

Describe the assessment methods and process used to evaluate student learning with respect to the PLO, including the process for evidence collection and analysis and curriculum alignment. In general, what methods were employed to gather and evaluate evidence/data to address the assessment question?

Supporting details that provide insight into the validity and reliability of the results should be described. These will likely include: (1) the number of lines of evidence and their forms[3], (2) sample size and sampling strategy[4], (3) pilot-tested and revised rubrics[5], and (4) methods for faculty calibration[6]. How and to whom results and conclusions were disseminated as well as how next steps were decided should be included here. Please also be sure to describe the curriculum alignment process.   Relevant dates and meeting times are useful to include.

IV. Results (2 pages maximum)

Summarize in written and tabular (or graphical) form the results of the analyses of the direct and indirect evidence of student learning with respect to the PLO, including the alignment of course learning outcomes with the PLO.

As appropriate and meaningful, quantitative summaries should be included as should performance expectations against which these results will be evaluated (i.e. benchmarks or standards). The following are some ways to approach describing results: (1) Are your students meeting your program's performance expectations, for example, as described by a rubric? What percentages at what levels of performance? (2) How do your students compare to peers (majors to non-majors, to other UC majors, or to students at comparable non-UC institutions)? (3) Are your students improving? How many and how so? (4) Are students doing as well as they can? If not, what is their potential capability?

---

[3] Does the study involve direct and indirect sources of evidence regarding student achievement of the PLO? Does the evidence allow the program to examine the impact of the *program's* curriculum on student learning?

[4] What are the demographic characteristics of the students sampled? For example, are they mostly seniors? Were the students motivated to produce high quality work that reflects their abilities? For example, were the assessments required coursework (i.e. embedded) or were students asked to volunteer for the assessment?

[5] Rubrics that have been used and revised to refine descriptions and improve usefulness.

[6] Faculty calibration, also called norming, involves collaboratively developing rubrics with explicit criteria and standards and, in the review of student work, using methods to promote inter-rater reliability (high-levels of agreement among individuals in the scoring of student work).

V. Conclusions & Recommendations (2-3 pages maximum)

  A. *Student Learning*: Describe the implications of the results, integrating direct and indirect evidence of student learning and the curriculum alignment results, as relevant. Also consider the effect the program's assessment methods may have on the validity and reliability of the results. Recommend actions to improve student learning with respect to desired intellectual skills and knowledge as well as a timeline for implementation. Actions may fall into one or more of the following categories or perhaps others: (1) instruction, (2) curriculum, (3) course sequencing, (4) co-curricular support for student learning (ex. tutoring, library instruction, etc.), or (5) communicating expectations to students.

  B. *Assessment Methods*: Describe what worked and did not work in this assessment process and how it can be improved. Identify practices that can be improved immediately and those to be established as long-term goals. Consider issues like the precision of the research question, appropriateness of the evidence, factors affecting the 'assessability' of the PLO, and validity of the results. In relation to the latter two items, consider the verb of the PLO. Is it sufficiently precise to promote shared performance expectations among faculty and students and meaningful assessment? Active verbs like "demonstrate by…" or "solve," that show how learning is applied, support student learning (and its assessment) more effectively than verbs of general cognition such as "know" or "understand". Additionally, do faculty share a common understanding of what a particular level of performance looks like, i.e. are the faculty "calibrated" so that different individuals will reliably draw the same conclusions about the quality of student work?

VI. Implications of Proposed Changes (Planning / Budget) (1 page maximum)

Are there any resources that will be needed to implement the above plans for improvement? How and where will be the resources obtained?

VII. Self Evaluation (1 page maximum)

Using the appended "Rubric for the Report on PLO Assessment", evaluate your program's level of development for each criterion (far left column). Please include a brief explanation for each rating.

VIII. Appendices

Please be sure to append any rubrics used to evaluate student work together with representative examples of scored student work. This will support calibration and comparison when revisiting the PLO in the future as well as the examination of student learning during program review. WASC will also expect this material to be available in future accreditation reviews. Similarly, your program might also consider including *as appropriate* relevant meeting summaries, summary reports, or memos.

RUBRIC FOR REPORT ON PLO ASSESSMENT
Center for Research on Teaching Excellence

	Criterion	Initial	Emerging	Developed	Highly Developed
ASSESSMENT METHODS	**Assessable Program Learning Outcome (PLO)**	PLO does not identify what students can do to demonstrate learning (vague, immeasurable verb statements like "students understand major theories"). No rubric developed.	PLO indicates how students can demonstrate learning. Action verb may be general and the PLO may not be observable or measurable. Assessment criteria[1] have not been identified or are incomplete. Rubric in early stages of development.	PLO describes how students can demonstrate learning, identifying observable and measurable results. Criteria are articulated in the form of a rubric, criteria and standards[1] may need further development to be more meaningful and consistently applied.	PLO specifically describes how students can demonstrate learning. Rubric clearly articulates explicit criteria and standards[1] for assessing the PLO, identifies the most important aspects of student learning, and includes descriptions of student performance at varying levels.
	Valid Evidence	It is not clear that potentially valid evidence is collected for the PLO and/or individual faculty use personalized rather than programmatic criteria and standards[1] to assess student work or performance.	Faculty have reached general agreement on the types of evidence to be collected for the PLO but may not include both direct and indirect forms. Evidence needs to be further focused or aligned with PLO or emerging criteria to produce truly meaningful and useful results.	Faculty collect relevant & sufficient evidence for each outcome, including both indirect and direct evidence. Assessment instruments (ex. rubric) assess the level of student attainment. Evidence is aligned with the PLO and assessment criteria to enable meaningful results and conclusions.	Assessment criteria have been pilot-tested and refined over time, usually shared with students. Direct and indirect evidence are designed to mutually inform conclusions. Feedback has led to refinements in the assessment process.
	Reliable Results	Reviewers of student work are not calibrated to apply assessment criteria in a uniform way; there are no checks for inter-rater reliability	Reviewers are calibrated to apply assessment criteria in a uniform way _or_ faculty routinely check for inter-rater reliability.	Reviewers are calibrated to apply assessment criteria in a uniform way _and_ faculty routinely check for inter-rater reliability.	Reviewers are calibrated, and faculty routinely find assessment data to have high inter-rater reliability.
RESULTS & CONCLUSIONS	**Results Summary**	Results (data table or other means) are not included in report.	Results (data table or other means) are included but unclear or missing key data.	Results clearly delineated for each line of evidence in tabular or other summary formats. May reference benchmarks or other expectations.	Results clearly delineate each line of evidence, indicating various levels of achievement. Includes benchmarks.
	Conclusions & Recommendations	Report identifies implications but no recommendations for improvement in student learning or assessment practices and no explanation of how these claims are derived. No reasoning offered in support of claims.	Report identifies some conclusions, implications, and recommendations for improvements regarding student learning or assessment, but the claims are vague or questionably related to results. Support for claims is occasionally insufficient. Questions of validity or reliability are not discussed. Results may be discussed by limited number of faculty, recommendations may be difficult to implement due to lack of convincing results and/or limited faculty involvement or support.	Report clearly articulates conclusions, implications and recommendations for improvement regarding both student learning and assessment and which could be drawn from results. Includes some consideration of the reliability and validity of results. May offer vague support for some claims. Results have been discussed by many faculty and recommendations likely to be implemented due to faculty involvement and support and quality of assessment work.	Report articulates a well-reasoned critique of conclusions, implications, and recommendations that could be drawn from the results for both student learning and assessment. Includes a well-reasoned discussion of validity and reliability of results. Faculty discuss results, plan needed changes, secure necessary resources, and implement changes. Efforts to collaborate with others, such as librarians or student affairs professionals, to improve results.

[1] Criteria are the specific skills or abilities to be measured. Standards describe the levels of performance for a given criterion (ex. proficient to exemplary).
Authored by Laura E. Martin and Anne Zanzucchi, Center for Research on Teaching Excellence, University of California, Merced, based on rubrics by C. Jenefsky & JFKU Program Review Council (2008) and WASC (2007).

This rubric has five major criteria:

(1) **Assessable Program Learning Outcomes**: Program learning outcome should be reasonable and appropriate for the degree level. If national disciplinary standards are available, the PLO may reflect those priorities. To be assessable, it should involve specific, active verbs with supporting details describing how students will demonstrate their learning. For instance, avoid verbs of general cognition such as "know" or "understand" and instead use verbs like "demonstrate by" or "solve" that show how learning is applied. Through discussion of examples of student work and perhaps course-specific rubrics used by faculty, faculty groups have agreed on explicit criteria[2] and elaborated a program-level rubric. For more information, see <http://crte.ucmerced.edu/program-learning-outcomes-resources>.

(2) **Valid Evidence**: To be valid, evidence must be discussed among faculty and aligned with both the expectation(s) described by the PLO and the criteria[2] faculty use to evaluate student learning. Valid evidence is also linked to sample size or sampling approach, so as to be representative of a norm. For more information, see the appended selection on sample sizing from Linda Suskie's *Assessing Student Learning: A Common Sense Guide* (2004).

(3) **Reliable Results**: Reliable results stem from agreement among faculty about the standards[2] used to evaluate student work, usually as articulated in a faculty-developed, program-wide rubric. Agreement about how to apply these standards in the evaluation of student work (i.e. calibration) is rooted in discussion and practice. Some questions to consider are: How do faculty promote calibration? How do faculty check for calibration? I.e. when faculty apply a rubric to student work, how consistently do they reach the same conclusions (i.e. exhibit inter-rater reliability)? If results are inconsistent, how can inter-rater reliability be improved?

(4) **Summarizing Results**: When drafting a results chart (data table or other means), it is important to consider multiple audiences. How would faculty within your department understand the results? If viewed by outside stake-holders like students, faculty from other programs, administrators, parents, etc., would they reach similar conclusions? Comparing the results to previous results in your program, expectations your program has set for student learning, or to results of similar programs within or outside of the UC (i.e. benchmarking) can provide context for interpreting the results.

(5) **Conclusions and Recommendations**: An effective conclusion closes the loop by analyzing results and implementing change. The narrative should address some probable conclusions based on the results. For example, if students were not given a clear incentive to participate in a particular assessment, the results may not be completely reliable as students may not have been motivated to perform at their best. Specific actions and a timeline for implementation should also be provided since the goal is to gather data to improve both student learning and the ability to engage in effective assessment. Changes might include improving the assessment process or curriculum, examining curriculum content in support of skill development, changing pedagogical practices, stimulating faculty discussion, simply re-examining program learning outcomes, or identifying ways student support services (tutoring, advising, the library) might contribute to increased student success.

---

[2] Criteria are the specific skills or abilities to be measured. Standards describe the levels of performance for a given criterion (ex. proficient to exemplary) and in doing so enable their measurement.