Fullerton College
Student Learning Outcomes and Assessment
Preferred Practice Handbook

Prepared by the Fullerton College
SLOA Committee:

SLOA Committee Members

Student Learning Outcomes Website

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The SLOA Committee developed the SLOA Preferred Practices Handbook with input and feedback from division faculty and the Curriculum Committee. The SLOA Committee identified standards and guidelines with the understanding that departments and divisions may have valid reasons for deviating from the preferred practices.

When appropriate, the SLOA Committee provided both a preferred practice and a rationale in order to help faculty develop practices that are consistent with the purpose and intent of the preferred practice. In all cases, activities and practices associated with the SLOA cycle should have as their goal to provide faculty and the college with necessary and reasonable information to ensure the quality of the college’s courses and programs.
1. Developing Student Learning Outcomes

a) **How should SLOs relate to instructional objectives?**
   Objectives represent the individual components of the course, while SLOs represent the result of those components. Objectives are the stepping stones; SLOs are the destination, or what the student takes away from the course.

b) **How should SLOs relate to course content?**
   To the extent possible, the SLOs should reflect all the major concepts of the course content.

c) **What level of difficulty is appropriate for SLOs?**
   The level of difficulty or level of critical thinking indicated in a course’s SLOs should reflect the level of the course. For example, basic skills or developmental courses would be more likely to include recall or skill-based outcomes while 100-level course SLOs should reflect a higher level of analysis and critical thinking.

d) **Should all courses within a department have similar SLOs?**
   Not always, but it is preferred to reflect similar or sequential course outcomes in the SLOs where such similarities exist. For example, many math courses include an SLO of equation solving. The types of equations and difficulty level increase from course to course through the sequence. For example, in a MATH 040 F SLO, students perform operations on and simplify polynomials, rational expressions, radical expressions, logarithmic expressions, or exponential expressions at an intermediate level while in MATH 250AF SLO students perform partial differentiation to find extrema of multivariable functions.
e) Who should faculty go to for assistance with SLOs and SLOAs?
   Each Division has an SLO Division Representative on the SLOA Committee to provide assistance to faculty on development and assessment of SLOs.

f) Does the Curriculum Committee evaluate SLOs when approving new and revised courses?
   Rationale: The Curriculum Committee is responsible, under Title 5, for reviewing all sections of course outlines and curriculum proposals, but generally trusts the expertise of department faculty regarding the appropriate content of the course.
   Preferred practice: SLOs are added or revised as a minor revision in CurricUNET, which takes approximately six weeks to process. Division SLO Reps are reviewers in CurricUNET and receive an email notification from CurricUNET-Governet any time a curriculum proposal for their division is pre-launched. The Curriculum Committee primarily checks for proper format and measurable verbs. However, the committee may comment or make suggestions if SLOs do not seem to align with course content or if there are any concerns about measurability.

g) If a department wants to change the SLOs for a course, does the entire course come under review by the Curriculum Committee?
   Rationale: To ensure data integrity and consistent data entry, a process is needed for how SLOs are revised or added to a course. Title 5 requires inclusion of SLOs in the Course Outline of Record (COR), and any/all changes to the COR must go through the curriculum approval process. New or current versions of SLOs are added to eLumen only by the data steward.
   SLO changes do not require revision or review of the entire course, only elements directly related to the SLO(s).
   Preferred practice: SLOs are added or revised as a minor revision in CurricUNET, which takes approximately six weeks to process. SLOs can be added/deleted/modified using CurricUNET as part of a minor revision (in glossary) or major revision. When a new or modified SLO has been approved by the curriculum process, it should be updated in eLumen and is ready for assessment.
   The Curriculum Committee notifies the SLOA Committee chair and SLOA Coordinator of any changes that may affect data entry in eLumen. Only the data steward enters new and revised versions of SLOs in eLumen.

h) Does the Curriculum Committee evaluate methods of assessments (MOAs) when approving new and revised courses?
   Rationale: The Curriculum Committee is responsible for reviewing all sections of course outlines and curriculum proposals, but generally trusts the expertise of department faculty regarding the appropriate content of the course.
   Preferred practice: SLOs and MOAs are revised at the same time in CurricuNet. Please seek advice and discuss the revision process with your Division SLO Rep, who may consult with your Division Curriculum Rep during the approval process.

2. Determining a plan to assess

a) How do we choose an appropriate MOA for an SLO?
   Rationale: The selection of MOAs should be based on both practical and pedagogical concerns. In addition, MOAs should be aligned to those outlined in the curriculum approval process. (More information about recommended MOAs is available through CurricuNET help screens.)
Preferred Practice: Faculty should consider the measurable verb used in the SLO and select an MOA based on the level of critical thinking involved, the nature of the student work required to display the skill or knowledge indicated in the outcome. For example, SLOs that begin with verbs such as *explain, discuss, or analyze* would generally require students to write an essay, present a speech, write short answers, present proofs, or other subjective forms of assessment. Objective assessments, such as multiple choice tests, are appropriate for SLOs that begin with verbs such as *identify, select, label, or define*.

b) Who should select MOAs?
Rationale: The SLOA process is directly tied to course content and instruction, which are the purview of faculty. In addition, each discipline has unique needs and concerns related to the knowledge and skills being taught.
Preferred Practice: Department faculty should, through discussion with colleagues, identify MOAs from those approved by the Curriculum Committee and the Faculty Senate that are best suited to the course SLOs.

c) Should all students being assessed in a course be given the same assessment?
Rationale: In order for assessments to be meaningful and useful for evaluating the effectiveness of a course, the number of variables involved in an assessment should be minimized.
Preferred Practice: For objective methods of assessment, students should be given the same assessment. For subjective methods of assessment, such as essays, performances, or speeches, assessments should be qualitatively similar and their work should be assessed using a standard evaluation tool, such as a common rubric or performance description.

d) How frequently should courses be assessed?
Rationale: The decision about how frequently to assess a course should find a balance between too frequent assessment, which can create an undue burden on faculty and staff and doesn’t allow faculty sufficient time to reflect on and make use of assessment data, and too infrequent assessment, which introduces too many variables to allow for effective comparison of the results of subsequent assessment.
Preferred Practice: At a minimum, each SLO should be assessed once prior to writing the self-study Program Review. Program Review self-studies are prepared every 3 years currently. Faculty may wish to assess a SLO more often in order to check the effect of changes/improvements to the course. Courses that are offered infrequently may need to deviate from this schedule; faculty should work with the Department to develop a plan for assessment. The plan should include an assessment schedule that is updated by the SLO committee representative or a designated faculty member in the department.

e) Which students should be assessed?
Rationale: SLOs represent what students are expected to know at the time of assessment.
Preferred Practice: All students enrolled in the class at the time of assessment should be included in the assessment or included in the group from which the sampling will be taken.
Rationale: The decision about how many students to assess should take into account the nature of the assessment method and the type of student work being collected.
Preferred Practice: Students may be assessed by direct or indirect methods. Regardless of whether the method is direct or indirect, it is important to assess a representative sample size of all students in large, multiple section courses. For small or single-section courses all students present should be assessed. For larger or multi-section courses the Department should determine what constitutes a representative sample of students to access. In this case
random sampling of students should be employed. If there are less than 45 students in a single section course, it is preferred to assess all students.

f) **At what point in the semester should assessments be conducted?**
   
   **Rationale:** SLOs reflect the culmination of learning at the time of assessment
   
   **Preferred Practice:** At any time during the semester, students may be assessed at the discretion of the department and the faculty of record.

3. **Assessing what students learned**

   a) **Should individual instructors be anonymous in the reporting of assessment results?**
   
   **Rationale:** Assessments of SLOs are designed to evaluate courses and programs, not to evaluate instructors or individual students. However, many instructors may wish to see how their students did in the assessment.
   
   **Preferred Practices:** Instructors should not be identified when reporting results. Data collection procedures should be designed to protect instructor’s anonymity but still allow individual instructors to retrieve the results of their students. (For example, using instructor-generated codes on student work; using students’ ID numbers rather than CRNs.) Only instructors should be permitted to retrieve data about the results of assessment of their students. When appropriate and agreed upon by the department and the instructor of record, a proxy may be assigned to enter scores for faculty.

   b) **Should students’ identity be removed from work being assessed?**
   
   **Rationale:** Assessments of SLOs are designed to evaluate courses and programs, not to evaluate students.
   
   **Preferred Practice:** Student identity can be included but can also be removed if desired when conducting the assessments; however, student identity should not be included when reporting results of assessments.

   c) **Should the results of assessments be aggregated for sections of a course?**
   
   **Rationale:** Assessment is of a course, not course sections.
   
   **Preferred Practice:** When reporting results of assessment in eLumen, sections of the course are provided as an aggregated result for discussion purposes. Collective scoring in eLumen is permitted, but not recommended by the SLOA Committee because 1) eLumen aggregates data for the faculty member when assessment scores are entered for each student and 2) assists in the disaggregation by subpopulation of data at the institutional level. However, discussion/evaluation of SLOA results at the course, department, or division level should not identify or single out faculty or students. While data disaggregation by subpopulation in eLumen based on acceptable sample sizes may be appropriate, it is not required at the course level.

   d) **Who should have access to the results of assessment?**
   
   **Rationale:** Results of assessment have implications for the entire department and its offerings.
   
   **Preferred Practice:** Faculty members of a department may have access to the aggregated results of assessments for any course offered by that department in consultation with the faculty of record.

   e) **Should assessment evidence be stored?**
   
   **Rationale:** Departments will find it useful to have examples of student work assessed when planning future assessments and for discussing the implications of assessment results.
Preferred Practice: A representative sampling of student work as needed for course planning and discussion should be stored. These samples may include tests, scantrons, essays, slides or photographs of projects/creative pieces, video or DVD recordings of performances, reports, and meeting minutes. When storing student work, the identities of individual students should be removed to the extent possible.

f) Where should student work be stored after assessment is completed?
   Rationale: Student work used for assessment purposes should stay under the control of the department.
   Preferred Practice: A sample of student work may be uploaded into eLumen and archived or maintained by the faculty of record. Student work, meeting minutes, and improvement plans may be archived in eLumen or the department (with the assistance of the division dean) may identify a secure location for pertinent SLOA documentation.

4. Analyzing and interpreting data

After gathering assessment results, department faculty should meet to use the aggregated data to evaluate the course.

a) What can be evaluated using assessment results?
   Preferred Practice: Faculty should use assessment results in conjunction with other information and data to evaluate course content, methods of instruction, textbooks, and other factors associated with the course. In addition, assessment results may be used to evaluate the appropriateness of the SLO and the method of assessment (MOA), and other elements of the assessment process.

b) What can assessment results tell us about a course?
   Preferred Practice: In conjunction with other information and data about the course, assessment results can help faculty understand the effectiveness and appropriateness of instructional methods, course content, and the SLOA process. Examples of conclusions faculty could draw from assessment results include:
   - Incorporating additional or alternative methods of instruction
   - Expanding course content
   - Revising or adding an assignment
   - Revising an existing SLO
   - Adding one or more SLOs
   - Changing the method of assessment
   - Revising course content to emphasize a topic or skill

c) What information about assessment results should be reported within a department?
   Rationale: SLO assessments are a tool a department can use to evaluate its courses, and the focus of assessment results should be on how assessment results informed a department’s ongoing discussion of the effectiveness of its courses. This information should be provided in a timely manner to the department faculty. SLOA data may be used to identify needs and resources for program review planning and budgeting.
   Preferred Practice: By the end of the semester following assessment, departments should prepare a report that includes:
   - Aggregated results by course for the percentage of successful students who met the SLOs and successful students who did not. Information about individual students or instructors should not be included in this report.
○ A summary of the department’s discussion of the significance of the results
○ Any proposed changes to the course, SLOs, method of assessment, or other aspect of the SLOA process.

d) In what format should this report be prepared?

**Rationale:** eLumen provides reports. While reports are available in eLumen, the format of the report is at the discretion of the department in consultation with faculty and the division dean.

**Preferred Practice:** Departments should use the eLumen reports to produce aggregated results. eLumen data entry, reflection, documentation, and reporting is available for SLO assessment use to help oversee improving learning outcomes for courses. A checklist to follow progress on ‘closing the loop’ including examples of prompts for reflections and an action plan template is provided on the Fullerton College SLO website.

e) Who should receive a copy of a SLOA Report?

**Rationale:** Changes to a course and/or SLOA process may involve the division dean and staff.

**Preferred Practice:** The department coordinator should provide the division dean with a copy of the SLOA report when appropriate.

e) What information about SLOA results may be shared with the campus?

**Rationale:** Campus administrators need to be apprised of the progress of SLOA.

**Preferred Practice:** Division deans may share a SLOA report of aggregated results with campus administrators if requested.

5. Utilizing data to improve learning

a) Can SLOs or MOAs be changed after one cycle of assessment?

**Rationale:** A SLO is dynamic and should reflect changes in the department over some period of time.

**Preferred Practice:** At any time, if the SLO or the assessment method is deemed either inadequate or inappropriate, a version of the SLO, either current or new, and the accompanying MOA can be submitted to the Curriculum Committee for approval.

b) Who and where does one submit changes to courses, course sections, and SLOs in eLumen?

**Rationale:** From time to time, an error or modification is needed in eLumen that requires editing. Since this may affect the data globally in eLumen, the system administrator (data steward) edits eLumen.

**Preferred Practice:** To ensure data integrity, the data steward edits courses, course sections, and SLOs in eLumen. If an error is found in eLumen, please contact the SLOA Committee chair, SLOA Coordinator or data steward. Currently the SLOA Committee chair, SLOA Coordinator or data steward is the same person and contact information is listed on the SLO website.

c) How do the SLOA reflections fit into the process of program review?

**Rationale:** Ultimately SLOs assessment results are used to make informed decisions based on collected data and findings are shared with appropriate stakeholders. To provide findings and make informed decisions requires faculty to reflect on collected data and develop improvement plans. The improvement plans and SLO findings are reported in program review.
Preferred Practice: Faculty will provide reflections in eLumen for future planning during the program review cycle. The reflection template is listed on the SLO website.
**Glossary**

*Action Plan* – a course improvement plan

*Authentic Assessment* - attempt to measure what a student actually learns in class rather than the student’s ability to do well on traditional tests and quizzes.

*Collective Scoring* - aggregating scoring by the class as a whole

*Course Coordinator* – course lead or course liaison

*CSLO* – Course Student Learning Outcome

*Data Steward* - the system administrator in eLumen

*Direct Assessment* - measures student performance of identified learning outcomes. Examples of direct assessments are: pre/post test; course-embedded questions; standardized exams; portfolio evaluation; videotape/audiotape of performance; capstone course evaluation.

*Division SLO Coordinator* – Your SLO Division Representative on the SLOA Committee

*Faculty/Evaluator* – Faculty is typically the faculty of record for a course section. An evaluator is someone assigned to input data for a faculty member with their approval.

*Indirect Assessment* - measures opinions or thoughts about student knowledge, skills, attitudes, learning experiences, and perceptions. Examples of indirect measures are: student surveys about instruction; focus groups; alumni surveys; employer surveys.

*ISLO* – Institutional Student Learning Outcome

*Major revision* – comprehensive curriculum update process required for any changes that impact the college catalog or the scope of the course, required for six-year review.

*Measurable Verbs* - Benjamin Bloom created a taxonomy of measurable verbs to help us describe and classify observable knowledge, skills, attitudes, behaviors and abilities.

*Minor revision* – curriculum update process for limited changes that do not impact the college catalog or the over-all scope of course content, methods of instruction, or methods of evaluation. This includes SLO modification, textbook updates, etc.

*Moa* – Method of Assessment

*Orgs* – organization (i.e. department or area) may be an instructional or non-instructional entity

*Program Coordinator* – a department coordinator

*PSLO* – Program Student Learning Outcome

*Reflection* – faculty findings and recommendations or interventions for a course assessment

*Reflection Template* – Fullerton College template for reflection SLOAC approved in eLumen

*SLO* – Student Learning Outcome
**SLOA Cycle** – three year approved time period where every CSLO needs to be assessed at least once minimum, corresponds to Program Review Cycle

**Term** – a semester