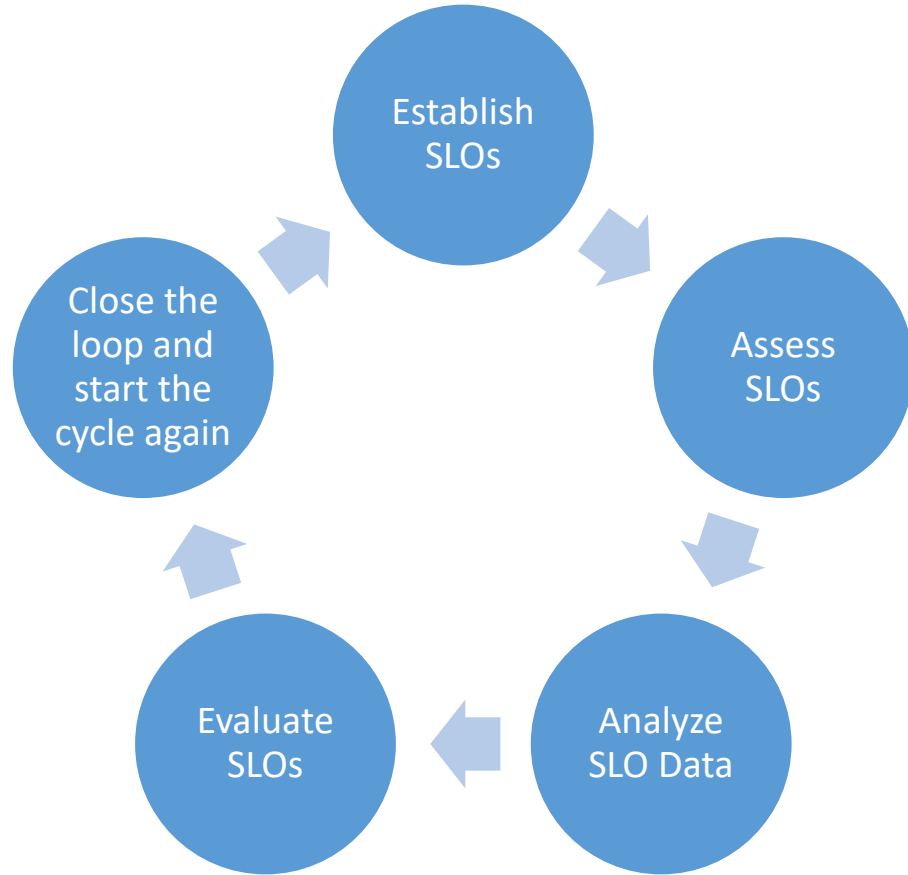


**San Bernardino Valley College**  
**Outcomes Handbook**



Approved By  
SBVC Academic Senate  
2/6/2019

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## Key Terms and Definitions

**ASLO Committee:** Accreditation and Student Learning Outcomes Committee

**CC: Core Competencies (CC)** is the name previously used for Institutional Learning Outcomes (ILOs)

**ILO:** Institutional Learning Outcomes are the knowledge, skills, and abilities a student is expected to leave an institution with as a result of a student's total experience.

**PLO:** Program Learning Outcomes

**SAO:** Service Area Outcomes

**SLO:** Student Learning Outcomes

**Accreditation and Student Learning Outcomes Committee:** The Accreditation and Student Learning Outcomes Committee prepares the self-study, prepares for the accreditation team site visit, follows up on implementation of accreditation recommendations, performs assessments as needed, and prepares any follow-up reports or documentation. The committee monitors the development and assessment process for student learning outcomes in courses, programs, and general education requirements. The committee generates and regularly reviews guidelines and best practices for all aspects of the student learning process.

**Core Competencies (CCs)** is the name previously used for Institutional Learning Outcomes (ILOs)

**Institutional Learning Outcomes:** Institutional Learning Outcomes are the knowledge, skills, and abilities a student is expected to leave an institution with as a result of a student's total experience.

**Instructional Outcomes:** Instructional Outcomes collectively refers to SLOs and PLOs

**Learning Outcomes** collectively refers to Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs)

**Mapping:** the process of analyzing how outcomes build upon one another within a particular learning pathway. When dealing with outcomes and assessment, it is important to determine that course outcomes align or match up with program outcomes and that institutional outcomes align with the college mission and vision.

**Objectives** are small steps that lead toward a goal, such as the discrete course content that faculty cover within a discipline. Objectives are usually more numerous and create a framework for the overarching

student learning outcomes which address synthesizing, evaluating, and analyzing many of the objectives.

**Outcomes** collectively refers to all outcomes that are assessed and evaluated, Institutional Learning Outcomes (ILOs), Service Area Outcomes, Student Learning Outcomes (SLOs), and Program Learning Outcomes (PLOs).

**Program Learning Outcomes:** Program Learning Outcomes (PLOs) for a certificate or degree program are defined as the knowledge, skills, or behaviors that a program's students should be able to demonstrate upon program completion.

### **Service Area Outcomes**

**Student Learning Outcomes:** Student Learning Outcomes (SLOs) are defined as: the knowledge, skills, or behaviors that a students should be able to demonstrate upon course completion.

# Benefits of Using Outcomes

## **College Benefits**

The ACCJC requires colleges to engage in ongoing assessment and evaluation of learning outcomes. Assessment and evaluation provides the accrediting agency with evidence of student learning and program quality. We engage in SLO assessment and evaluation, however, not just as an empty exercise to achieve accreditation but because the information gained can allow us to highlight what we do well and help us to improve our programs and services for students in areas where we might be lacking. Because SLO assessment has become standard in all four-year colleges and universities as well, aligning our SLOs with the SLOs of our primary transfer institutions facilitates the articulation process.

## **Faculty Benefits**

The primary benefit for faculty and programs is the increased dialogue that results in relation to teaching and learning. Discussions about the use of SLO assessment and evaluation results lead to an exchange of ideas and pedagogical techniques among faculty within and even across departments.

As individual faculty members, we can also benefit from SLO assessment because it provides a method to evaluate how well we are teaching different sections of our courses. Thus, at the end of the semester we can use this information to evaluate our course structure or teaching methods.

Using SLOs also makes structuring a course simple because it helps us to select appropriate activities, course materials, and assignments to accomplish our goals for the class. In addition, it helps us to focus our course on what we really want students to go away with at the end of the semester.

## **Student Benefits**

Communicating student learning outcomes to students provides them with an upfront understanding of what they are expected to learn and demonstrate at the end of a course, certificate, or degree. Learning outcomes must be included on all course syllabi to inform students of expectations.

Using SLOs also changes the orientation of the class from what we want to cover to what a student should know or be able to do at the end of the semester. The result of this is a shift to student-centered

learning with an emphasis on student activity, interaction, and application that leads to higher-level processing.

### **Employer and Community Partner Benefits**

Prospective employers and community partners can have a clear understanding of what skill sets and competencies students have mastered.

## **What Areas of the College Should Have Outcomes?**

- All courses currently approved by the Curriculum Committee should have SLOs.
- All certificates and degrees currently approved by the Curriculum Committee should have PLOs.
- All Student Services and Administrative Services departments or programs that participate in the Campus Program Review process, independently or as part of a larger area, should have Service Area Outcomes. For instance the Student Success Center/Tutoring has SAOs and participates in program review. The Writing Center has SAOs, but participates in program review as part of the English Department.
- Instructional Support Services may have either SLOs, SAOs, or a combination of both.

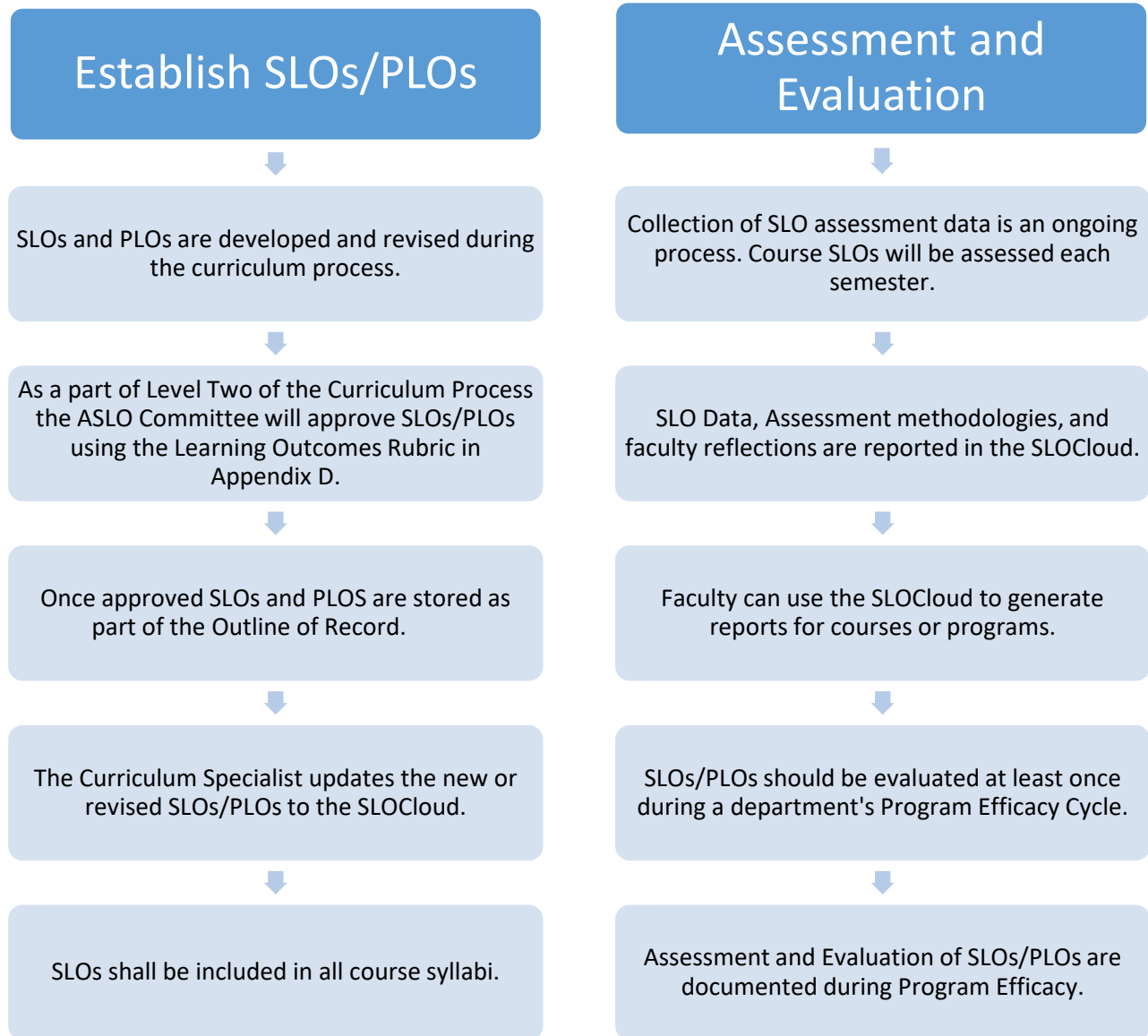
## **How Often Should Outcomes Be Assessed?**

Outcomes should be assessed on an ongoing basis. For SLOs this equates to assessing every class, every section, every semester and reporting the assessment data in the SLO Cloud. This includes assessment during the summer semester. Stacked courses such as ART 124A, ART 124B, and Art 124C have separate and unique SLOS and thus should be reported separately, not combined and reported in one section. All Student Services, Administrative Services and Instructional Support Services should also establish ongoing assessment and reporting practices.

## **Are Assessment and Evaluation the same thing?**

No, assessment measures how well students have mastered a learning outcome or how a department achieved a service outcome. Evaluation is a longitudinal analysis of assessment data, assessment methodologies, and faculty reflections to evaluate student mastery of learning outcomes and improve student learning, evaluate the validity of the Learning Outcomes and assessment methodology, to determine if new resources or professional development is needed, and an opportunity for faculty to share their challenges and successes.

## Quick Reference Guide to Instructional Outcomes





## Student Learning Outcomes & Program Learning Outcomes

### *Outcomes vs. Objectives*

Course objectives are often confused with learning outcomes. Course objectives refer to those things the instructor plans to include in the course, lectures, reading material, exercises, assignments, etc. Student learning outcomes (SLO) refer to the knowledge, skills, abilities, and self-awareness that a student can demonstrate as a result of enrolling in the course.

Course Objectives	Learning Outcomes
<b>In this course, students will be presented with 20th-Century American literature. They will receive assignments that require them to analyze the seminal works of this period.</b>	Upon successful completion of this course, students will be able to compare and contrast the literary techniques used in seminal works of 20 <sup>th</sup> Century American literature.
<b>This course will include lectures and reading assignments that examine the basic structure and function of cells.</b>	Students who successfully complete this course will be able to describe the differences between prokaryotic and eukaryotic cells.
<b>This course will provide students with instruction and assignments that provide them with skills to locate and evaluate the appropriate sources of information for a college research paper.</b>	Upon successful completion of this course, students will be able to perform a critical evaluation of material for an assignment regarding quality and appropriateness of sources of information using such factors as currency, reliability, accuracy, bias, credibility of author, and relevancy.
<b>In this course, students will be presented with materials that provide them a basis to research, create, support, and defend various types of arguments.</b>	Upon successful completion of this course, students will be able to give an effective persuasive speech.
<b>In this course, students will receive instruction and assignments that provide them with the knowledge to assess the impact of environmental law on business competitiveness.</b>	Upon successful completion of this course, students will be able to evaluate the potential consequences of proposed environmental laws.

## Establishing SLOs & PLOs

The Curriculum Committee is the repository for official SLOs/PLOs. The Course Outlines of Record (CORs) include SLOs, and Programs of Study include PLOs. Curriculum access is public, so by listing our SLOs/PLOs as part of the Course Outline of Record and Program of Study, we have complied with the requirement that the public have access to our outcomes.

Learning Outcomes for new courses and programs, and revisions to Learning Outcomes will be established through the Curriculum Approval Process, Content Review Process, or Modification Process. As a part of these curriculum processes the Accreditation and SLO Committee will be prompted to review Learning Outcomes.

The ASLO Committee developed the SLO Rubric (Appendix D) that was approved by the Academic Senate and Curriculum Committee to review learning outcomes.

Once the course or program has completed Curriculum, Regional (if applicable) the Board of Trustees, and State approvals, the Learning Outcomes become official and supersede any previous SLOs/PLOs. The Curriculum Specialist will update Learning Outcomes to the SLOCloud after all the approvals are complete.

## Writing SLOs & PLOs

Student Learning Outcomes (SLOs) give us the opportunity to assess the effectiveness of instruction and programs on campus. Making improvements to instruction and programs via assessment, reflection, and analysis will enhance student learning and success. An SLO is the “measurable knowledge, skills, abilities, and attitudes that a student has attained at the end (or as a result) of his or her engagement in a particular set of collegiate experiences” (From the ACCJC glossary). This encompasses experiences that include, but are not limited to, those found within a course, a program of study, a degree or certificate program, or services offered by the college.

Learning Outcomes for the classroom describe the knowledge, skills, abilities or attitudes that a student can **demonstrate** by the end of the course. Don’t think about content or coverage; consider what students should be able to DO with what they’ve learned by the end of the semester.

- How will students demonstrate this?
- What can they produce to show faculty that they have learned to apply their new knowledge?

For instance, if you want the students to understand how to correctly use a microscope - using the word *understand* is not measurable. Can you measure understanding? Instead try to imagine the outcome - Students will *focus* and *display* an image on the microscope. With this outcome, you can both develop criteria and measure ability.

### Learning Outcomes should:

- Describe the broadest goals for a class or program, ones that require **higher-level** thinking abilities.
- Require students to **synthesize** many discreet skills or areas of content.
- Ask students to then **produce** something -papers, projects, portfolios, demonstrations, performances, art works, exams etc. – that **applies** what they have learned.
- Require faculty to **evaluate** or **assess** the product to measure a student’s achievement or mastery of the outcomes.

### **Ask Yourself:**

- Does the learning outcome represent specific knowledge/skills/abilities/attitudes students will acquire as a result of an experience in the intended forum (classroom, program)?
- Is the outcome measurable in a continuous and sustainable way?
- Are the Learning Outcomes appropriate for the course?
- Are they consistent with the curriculum document of record?
- Do they represent a fundamental results of the course?
- Do they align with other courses in a sequence? (if applicable)
- Do they represent collegiate level work?
- Will the student understand the SLOs?

### *Sample SLOs*

- Upon successful completion of this course, students will be able to cite all sources used for their speeches in the form of a bibliography attached to their preparation outlines.
- Upon successful completion of this course, students will be able to identify anatomical differences between monocotyledonous and dicotyledonous plants.
- Upon successful completion of this course, students will be able to change the oil and the oil filter according to industry standards.

### *Sample PLOs*

- Upon completion of an AA degree in anthropology, students will be able to identify the ethical responsibilities and concerns in the conducting of anthropological research.
- Upon completion of an AA degree in music, students will demonstrate a working knowledge of musical analysis and harmonic theory applicable to their area of specialization.
- Upon completion of an automotive technician certificate, the students will demonstrate their ability to manipulate and solve a variety of applied technical problems using formula, conversion charts, and analysis with or without a calculator.

## Outcomes Assessment

After writing the SLOs and PLOs, we need to determine how we will assess them and what criteria we will use for success. The key thing to remember about assessing SLOs is to keep it simple, because overly complex assessment methods are too cumbersome to manage.

### *Methods of Assessment*

Once the SLOs for a course, certificate, major, or Student Services program are created, faculty must determine how to assess the SLOs and what criteria will be used for success. There are two kinds of assessment: **direct assessment** and **indirect assessment**.

- **Direct assessment** requires students to demonstrate knowledge and skills and provide data that directly measure achievement of expected outcomes. That is, students have to actively do something observable or measurable using the knowledge and skills stated in the SLO, and results are quantified through scoring mechanisms such as percentage correct, total points, or rubrics. Examples follow.
- **Indirect assessment** methods require that faculty infer actual student skills, abilities, knowledge, and values from sources other than observable, direct evidence. Often this involves students self-reporting their learning or growth. Specific examples follow.

Both methods are valid, although indirect methods alone are not always considered to provide sufficient evidence in instructional areas.

In many cases, the same assessment instruments in a course used for grading, such as exams, writing assignments, projects, or surveys, can be utilized or adapted to provide data regarding SLO assessment as well. This is known as **embedded assessment**.

## *Examples of Direct Assessment Methods*

### Capstone Evaluation Course

Capstone courses, often a part of CTE certificate and major programs, integrate knowledge, concepts, and skills associated with an entire sequence of study in a program. This method of assessment is unique because the courses themselves become the instruments for assessing student teaching and learning. Evaluation of students' work in these courses is used as a means of assessing student outcomes. For academic units where a single capstone course is not feasible or desirable, a department may designate a small group of courses where competencies of completing majors will be measured.

### Collective Portfolios

Faculty assemble samples of student work from various classes and use the “collective” to assess specific course or program learning outcomes. Often a rubric is used as part of the evaluation.

### Commercially Produced or Standardized Tests

Commercially generated or standardized tests are used to measure student competencies under controlled conditions. Tests are developed and measured nationally to determine the level of learning that students have acquired in specific fields of study. For example, nationally standardized multiple-choice tests are widely used and assist departments in determining programmatic strengths and weaknesses when compared to other programs and national data.

### Embedded Questions on Assignments or Exams

Questions specifically related to student learning outcomes can be embedded within course assignments or exams. For example, all sections of the introductory biology course could include a set of questions relating to an SLO on research methods. Faculty would grade the exams as usual and then separate out exam questions that are linked to the SLO for analysis. The findings are reported as an aggregate.

**Locally Developed Final Exams** Faculty can create an objective exam for graduating students that is aligned with the course, certificate, or major SLOs. Performance expectations should be delineated prior to obtaining results.

### Pre-Test/Post-Test Evaluations

Pre-test/post-test assessment is a method used by academic units where locally developed tests and examinations are administered at the beginning and at the end of courses or academic programs. These test results enable faculty to monitor student progression and learning throughout prescribed periods of time. The results are often useful for determining where skills and knowledge deficiencies exist and most frequently develop. Note: Pre-tests are not necessarily required to determine achievement of course SLOs. Pre-testing may allow faculty to determine more precisely the impact of that particular course on students' learning, but when the object is to determine whether students who complete the class have achieved the SLOs, one assessment toward the end is usually adequate.

#### Student Presentations

Observations of any behavior, such as performances, projects, and artwork can be used for assessment. These presentations or performances can be evaluated using a narrative or a structured format, such as a rubric.

#### Scoring Rubrics

Rubrics can be used to score any product or performance such as essays, portfolios, recitals, oral exams, artwork, skill demonstrations, and other more holistic demonstrations of application and integration of learning. A detailed scoring rubric that delineates criteria used to discriminate among levels is developed and used for scoring. For formal assessment and dissemination, two raters are usually used to review each product and a third rater is used to resolve discrepancies.

#### Videotape or Audiotape Presentation

Videotapes and audiotapes have been used by faculty as a kind of assessment of student skills and knowledge. Disciplines such as theatre, music, art, and communication that have experienced difficulty in using some of the other assessment methods have had significant success in utilizing videotapes and audiotapes as assessment tools. This method may also be useful for online and hybrid courses. Often rubrics are used for scoring.

## *Example of Indirect Methods of Assessment*

### Alumni Surveys

Surveying alumni is a useful assessment tool for generating data about student preparation for professional work, program satisfaction, and curriculum relevancy. As an assessment supplement, alumni surveying provides departments with a variety of information that can highlight program areas that need to be expanded or enhanced.

### Employer Surveys

Employer surveys can provide information about the curriculum, programs, and students that other forms of assessment cannot produce. Through surveys, departments traditionally seek employer satisfaction levels with the abilities and skills of recent graduates. Employers also assess programmatic characteristics by addressing the success of students in a continuously evolving job market.

### External Reviewers

Peer review of academic programs is a widely accepted method for assessing curricular sequences, course development and delivery, and the effectiveness of faculty. Using external reviewers is a useful way of analyzing whether student achievement correlates appropriately with departmental goals and objectives.

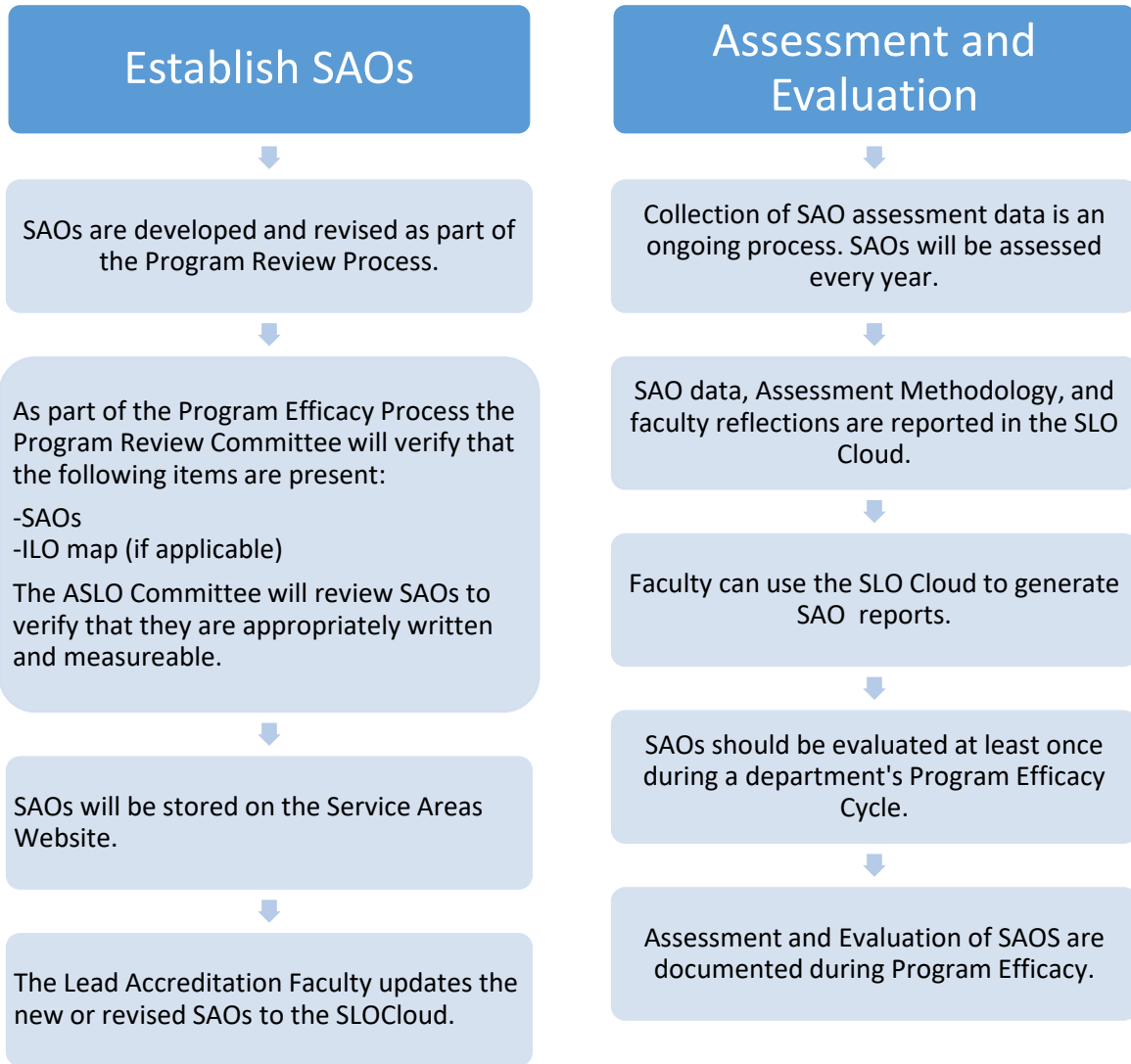
### Student Interviews/Surveys

Students are interviewed or surveyed to obtain feedback about specific areas relating to course or program SLOs. Data obtained can address strengths and weaknesses of the course or program and/or assess students' perception of their learning of relevant concepts, theories, or skills



# SAOs: Service Area Outcomes

## *SAOs Quick Access Guide*



## *What is an SAO?*

A Service Area Outcome (SAO) is a statement about what a stakeholder will experience, receive, or know as a result of a given service. A stakeholder can be anyone receiving a service, including students, faculty, staff, and community members.

Examples of Service Areas that would have SAOs are: Student Health Services, Counseling, Grounds, Library, Food Services. Some areas, such as tutoring, may have SAOs and/or SLOs.

Service area outcomes differ from SLOs and can be difficult to develop because:

- Service area outcomes (particularly administrative outcomes) tend to have indirect impacts on student learning, while SLOs directly impact students' learning (within a course, a program, or as the result of completing degree requirements).
- Service area outcomes measure successes, impact, and outcomes without a clear end product or within a defined period of time (such as the end of an academic term). Measuring an ongoing process is difficult.

Each service area should have outcomes defined that focus on either:

- A process, which focuses on services being provided efficiently, accurately, and equitably, or
- Stakeholder satisfaction, which focuses on support being provided by the program/unit in a satisfactory manner.

For example, an SAO that focuses on a process might be written as:

- Campus employees will receive mail in a timely and accurate manner.

An SAO that focuses on client satisfaction might be written as:

- Patrons will be satisfied with the library facilities.

## *Developing SAOs*

SAOs focus on outcomes that reflect the purpose or mission of the program and yield benefits for students or/and faculty and staff. They,

- Build on what you are already doing, using existing data as much as possible.
- Keep it simple and efficient.
- Make it meaningful for the service unit and staff.
- Make the outcomes measurable, actionable, and realistic. Focus on issues that you can address.

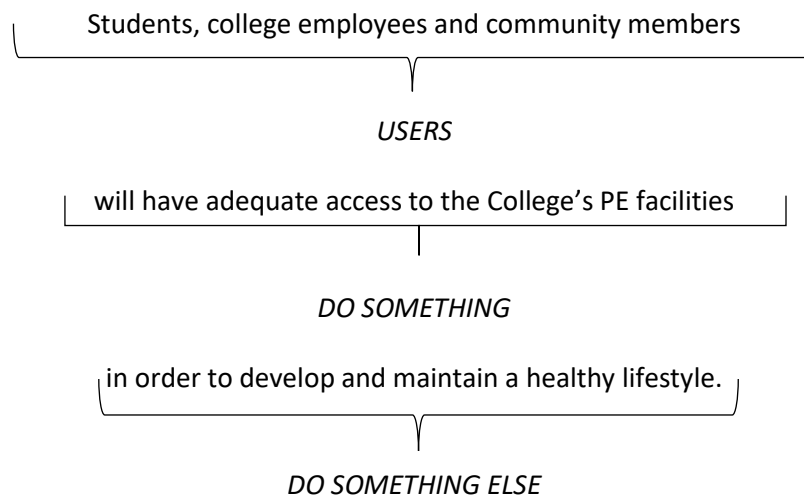
Service area outcomes should:

- Provide evidence that the support area is performing its function.
- Provide evidence of the program's effectiveness and help identify areas for improvement.
- Identify what stakeholders will be able to do as a result of the services your area provided.

While writing SAOs, keep in mind that although the name might sound as if an SAO describes a goal or outcome of the area, it is actually a user-centered statement, a statement of what others will be able to do with the service or how they will benefit from the service provided.

You may find it easier to write your area outcomes if you follow this simple pattern:

Users of the services will (do something) to (do something else)



### *Examples of Process SAOs*

- Faculty and staff will experience a decrease in the amount of time that submitted work orders to the IT area are addressed and issues resolved.
- Services are processed efficiently, accurately, and equitably in direct or indirect support of student learning.
- District faculty and staff will receive accurate and regular operational updates on facilities projects.
- Financial aid students will receive financial aid checks within X number of weeks after the semester begins.

Examples of Satisfaction SAOs (People supported by the program/unit report a positive reaction to the interaction)

- Faculty and students will report satisfaction in the services provided by the evening/weekend dean.
- District personnel will express satisfaction in Human Resources.
- Students will report that the supplemental learning activities they experience in the Tutorial Center contribute to their learning.
- Veteran students who use the Veterans' Center counseling services will report satisfaction.

## Evaluating Outcomes

Outcomes should be evaluated at least once during a department's program review cycle. Departments will provide evidence to the Program Review Committee that the department has fully evaluated within a four-year cycle and is continuously assessing all Outcomes (SAOs/SLOs/PLOs). Summary Evaluation Forms for SAOs, SLOs, and PLOs are included in the appendices.

Program evaluation and analysis should include department dialogue between the faculty chair, FT and adjunct instructional faculty for the program. Departmental dialogue on a program should be documented in meeting minutes or e-mail string. Topics addressed should include:

- Establishing a methodology and rubric for evaluating the outcomes.
- Establishing criteria for the outcomes ("What is good enough?")
- Analysis of Outcome assessment data, assessment methodologies and rubric.
- Determining if the outcomes have met the established criteria.

### *Closing the Loop*

"Closing the loop" is the most critical part of the SLO process. It occurs when results are used to improve student learning. This is accomplished after department faculty have spent time collecting and reflecting on data, engaging in discussions about how to improve teaching and learning, creating a plan to improve teaching and learning, and then implementing that plan. It is why we assess.

Evaluation of learning outcomes can result in recommendations for improving the teaching and learning process such as

- Rewriting outcomes, assessment methodology, or rubric.
- Professional development for faculty and/or staff.
- Changes in teaching methodology.
- Changes in curriculum.
- Changes in services offered.
- Changes in service hours.
- Requests for additional resources for successful program completion.

Closing the loop, applying evaluation and analysis of Outcomes to improvement in services and/or teaching and learning, can be noted in the department's annual EMP One-Sheet update, and reported during a department's program efficacy cycle.

There should be a clear tie between data and reflections in the SAO/SLO/PLO reports, department meetings minutes, evaluation forms, and program review documents.

Rewriting of SLOs/PLOs and/or curricular changes should be done through the Curriculum Committee's course modification process. Rewriting of SAOs should be done through the ASLO Committee.

### *After the Loop*

Learning outcomes have been written. Learning outcomes have been assessed.. Learning outcomes have undergone analysis and evaluation. Improvement to teaching and learning have been implemented.

Now what?

Now the cycle starts again. Ongoing assessment of Outcomes continues. Data and reflections on assessment informs analysis and evaluation. Analysis and evaluation leads to improvements in teaching and learning. The department's next Program Efficacy report closes the loop.

## Learning Outcomes and Accreditation

Learning outcomes are interwoven into Accrediting Commission for Community and Junior Colleges (ACCJC) accreditation standards. The standards with major focus on learning outcomes are:

Standard I.B.5: The institution assesses accomplishment of its mission through program review and evaluation of goals and objectives, student learning outcomes, and student achievement. Quantitative and qualitative data are disaggregated for analysis by program type and mode of delivery.

Standard I.B.6: The institution disaggregates and analyzes learning outcomes and achievement for subpopulations of students. When the institution identifies performance gaps, it implements strategies, which may include allocation or reallocation of human, fiscal and other resources, to mitigate those gaps and evaluates the efficacy of those strategies.

Standard I.C.1. The institution assures the clarity, accuracy, and integrity of information provided to students and prospective students, personnel, and all persons or organizations related to its mission statement, learning outcomes, educational programs, and student support services. The institution gives accurate information to students and the public about its accreditation status with all of its accreditors. (ER 20)

Standard I.C.4: The institution describes its certificates and degrees in terms of their purpose, content, course requirements, and expected learning outcomes.

Standard II.A.1: All instructional programs, regardless of location or means of delivery, including distance education and correspondence education, are offered in fields of study consistent with the institution's mission, are appropriate to higher education, and culminate in student attainment of identified student learning outcomes, and achievement of degrees, certificates, employment, or transfer to other higher education programs.

Standard II.A.3: The institution identifies and regularly assesses learning outcomes for courses, programs, certificates and degrees using established institutional procedures. The institution has officially approved and current course outlines that include student learning outcomes. In every class section students receive a course syllabus that includes learning outcomes from the institution's officially approved course outline.

Standard II.A.11: The institution includes in all of its programs, student learning outcomes, appropriate to the program level, in communication competency, information competency, quantitative competency, analytic inquiry skills, ethical reasoning, the ability to engage diverse perspectives, and other program-specific learning outcomes.

Standard II.A.16: The institution regularly evaluates and improves the quality and currency of all instructional programs offered in the name of the institution, including collegiate, pre-collegiate, career-technical, and continuing and community education courses and programs, regardless of delivery mode or location. The institution systematically strives to improve programs and courses to enhance learning outcomes and achievement for students.

Standard II.B.3: The institution evaluates library and other learning support services to assure their adequacy in meeting identified student needs. Evaluation of these services includes

evidence that they contribute to the attainment of student learning outcomes. The institution uses the results of these evaluations as the basis for improvement.

Standard II.C.2: The institution identifies and assesses learning support outcomes for its student population and provides appropriate student support services and programs to achieve those outcomes. The institution uses assessment data to continuously improve student support programs and services.

In order to remain fully accredited the college must demonstrate to the ACCJC that the college meets these standards for learning outcomes. The ACCJC provides the following rubric as a guide for colleges. Colleges are expected to be at Sustainable Continuous Quality Improvement.



Accrediting Commission for Community and Junior Colleges  
Western Association of Schools and Colleges

**Rubric for Evaluating Institutional Effectiveness – Part III: Student Learning Outcomes**

(See cover letter for how to use this rubric.)

Levels of Implementation	<b>Characteristics of Institutional Effectiveness in Student Learning Outcomes</b> <i>(Sample institutional behaviors)</i>
<b>Awareness</b>	<ul style="list-style-type: none"> <li>• There is preliminary, investigative dialogue about student learning outcomes.</li> <li>• There is recognition of existing practices such as course objectives and how they relate to student learning outcomes.</li> <li>• There is exploration of models, definitions, and issues taking place by a few people.</li> <li>• Pilot projects and efforts may be in progress.</li> <li>• The college has discussed whether to define student learning outcomes at the level of some courses or programs or degrees; where to begin.</li> </ul>
<b>Development</b>	<ul style="list-style-type: none"> <li>• College has established an institutional framework for definition of student learning outcomes (where to start), how to extend, and timeline.</li> <li>• College has established authentic assessment strategies for assessing student learning outcomes as appropriate to intended course, program, and degree learning outcomes.</li> <li>• Existing organizational structures (e.g., Senate, Curriculum Committee) are supporting strategies for student learning outcomes definition and assessment.</li> <li>• Leadership groups (e.g., Academic Senate and administration), have accepted responsibility for student learning outcomes implementation.</li> <li>• Appropriate resources are being allocated to support student learning outcomes and assessment.</li> <li>• Faculty and staff are fully engaged in student learning outcomes development.</li> </ul>
<b>Proficiency</b>	<ul style="list-style-type: none"> <li>• Student learning outcomes and authentic assessments are in place for courses, programs, support services, certificates and degrees.</li> <li>• There is widespread institutional dialogue about the results of assessment and identification of gaps.</li> <li>• Decision-making includes dialogue on the results of assessment and is purposefully directed toward aligning institution-wide practices to support and improve student learning.</li> <li>• Appropriate resources continue to be allocated and fine-tuned.</li> <li>• Comprehensive assessment reports exist and are completed and updated on a regular basis.</li> <li>• Course student learning outcomes are aligned with degree student learning outcomes.</li> <li>• Students demonstrate awareness of goals and purposes of courses and programs in which they are enrolled.</li> </ul>
<b>Sustainable Continuous Quality Improvement</b>	<ul style="list-style-type: none"> <li>• Student learning outcomes and assessment are ongoing, systematic and used for continuous quality improvement.</li> <li>• Dialogue about student learning is ongoing, pervasive and robust.</li> <li>• Evaluation of student learning outcomes processes.</li> <li>• Evaluation and fine-tuning of organizational structures to support student learning is ongoing.</li> <li>• Student learning improvement is a visible priority in all practices and structures across the college.</li> <li>• Learning outcomes are specifically linked to program reviews.</li> </ul>

# Institutional Learning Outcomes

Institutional Learning Outcomes describe the **abilities, skills and knowledge** that students will acquire at San Bernardino Valley College. Students will develop learning skills for success in college and life, discipline specific knowledge, and personal/social awareness. The ILO's below describe the competencies that every dedicated student will have after successful completion of their education goals at San Bernardino Valley College

## **ILO 1: COMMUNICATION SKILLS**

Literacy: reading, listening, observing, speaking and writing

Interpersonal skills: working with individuals and groups, including conflict resolution and giving/receiving constructive feedback

## **ILO 2: QUANTITATIVE SKILLS**

Mathematical theory: understanding mathematical concepts and structures

Applied mathematics: applying mathematical skills and numerical data to analyze and solve real world problems

Mathematical visualization: using graphs, charts, and tables

## **ILO 3: CRITICAL THINKING SKILLS**

Information literacy: finding, interpreting and evaluating information in print, electronic, and non-electronic media sources

Logical reasoning: constructing, supporting, analyzing, and evaluating arguments

Problem solving: using evidence-based reasoning to articulate a problem and propose hypotheses or solutions

Creativity: using creative reasoning for problem solving and personal and social expression

## **ILO 4: DISCIPLINE SPECIFIC SKILLS**

Discipline theory: understanding and employing discipline vocabulary, ideas, theories, standards and ethics

Discipline technology: using tools, computers, instruments, and equipment relevant to discipline

Discipline performance: working in labs, workshops, clinics, performances, and work experience relevant to discipline

## **ILO 5: PERSONAL, SOCIAL, PROFESSIONAL RESPONSIBILITY**

Self-knowledge: understanding and evaluating personal strengths, weaknesses, biases and values

Goal-setting: setting goals that are realistic and balance educational, professional and personal life

Cultural awareness: understanding and respecting one's own culture, other cultures, and diversity

Ethics: understanding and practicing ethics, intellectual honesty, fairness, and personal responsibility



# Appendix A: Using the SLO Cloud



San Bernardino Valley College

CHANGE PASSWORD | LOG OUT | MAIN MENU | FACULTY MENU | CONTACT US

FACULTY - WEBADVISOR FOR FACULTY MENU Welcome Celia J. Huston!

The following links may display confidential information.

**IMPORTANT NOTICE:**  
Do NOT click on a link or button more than once as this will increase your wait time to view the webpage.

<p><b>User Account</b></p> <p><a href="#">My Contact Information</a> <a href="#">My Emergency Information</a></p> <p><b>Faculty Information</b></p> <p><a href="#">Class Roster</a> <a href="#">Waitlist Roster</a> <a href="#">My Class Schedule</a> <a href="#">My Classes</a> <a href="#">Grading</a> <a href="#">SB Valley's SLO Submission</a> <a href="#">Crafton's SLO Submission</a> <a href="#">SB Valley's Online Scholarship Recommendations</a> <a href="#">SB Valley's FlexTrack</a> <a href="#">Online Track</a> <a href="#">SAP/SALRT</a> <a href="#">Crafton's FlexTrack</a> <a href="#">SBVC Faculty Handbook</a> <a href="#">CHC Faculty Handbook Fulltime</a> <a href="#">CHC Faculty Handbook Part Time</a></p> <p><b>Employee Information</b></p> <p><a href="#">My Email</a> <a href="#">My Leave</a> <a href="#">My Staff Directory</a> <a href="#">SB Valley's FlexTrack</a> <a href="#">Crafton's FlexTrack</a></p>	<p><b>District</b></p> <p><a href="#">Help Desk</a> <a href="#">District Information/Forms</a> <a href="#">Human Resource/Jobs</a> <a href="#">Board Policies and Procedures</a> <a href="#">Document Library</a> <a href="#">Library Catalog</a> <a href="#">Staff Directory</a> <a href="#">Online Print Orders</a></p> <p><b>CHC - Other Services</b></p> <p><a href="#">Incomplete Form</a> <a href="#">Grade Change Form</a></p> <p><b>SBVC - Other Services</b></p> <p><a href="#">Incomplete Form</a> <a href="#">Grade Change Form</a></p> <p><b>Other Services</b></p> <p><a href="#">Blackboard</a></p>
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WebAdvisor 3.1  
POWERED BY DATEL

The SLO Cloud can be accessed via the faculty menu in WebAdvisor or by going to <http://www.valleycollege.edu/slocloud> and logging in with your Outlook credentials

Once connected to the SLO Cloud use the Submission Form to report SLO Assessment results each semester. Use the drop down menus to select the term, division, department, course, and section you are reporting. Faculty will see only the sections for which they are the faculty of record.

#	SLO Statement	# of Students Assessed	# of Students who Met SLO
1	Identify and pronounce medical terminology properly when communicating orally.	0	0
2	Identify word roots, prefixes, and suffixes used in medical terminology as they relate to diseases, disorders, procedures, and diagnostic testing.	0	0
3	Understand the practical use of medical terminology in various work place documents and/or reports by evaluating case studies	0	0
4	Use written and/or oral communications skills to present information on topics related to diseases, disorders, procedures, and or diagnostic testing.	0	0

### Complete the reporting fields.

- **Assessment Methodology & Criteria:** Faculty should enter here how they assessed SLOs for the class. In cases where department faculty have mutually agreed on a common assessment this field will be prefilled.
- **SLO Statement:** SLOs may not be edited in the SLO Cloud. All sections of a course use the SLOs established through the campus Curriculum Committee. Faculty should report the number of students who were assessed on an SLO, and the number of students who met the assessment criteria.
- **Reflections:** These capture faculty insights into course instruction techniques and SLOs. Reflections become a valuable tool for assessment and evaluation of courses and programs.

Use the **Reports Tab** to generate course or program reports for use in evaluation and analysis of learning outcomes. Use the Drop Down Menus to define the criteria for your report.

Reports are available from 2013-2014 to the current year.

Reporting periods can be set for semester, annual 3-years or all years.

#	SLO Statement	# of Students Assessed	# of Students who Met SLO	% of Students who Met SLO
1	Students will demonstrate their ability to recognize and use effective speech delivery by constructing and presenting different types of speeches.	916	763	83.30%
2	Students will demonstrate their ability to construct and outline speeches through locating, reading, organizing, and critically evaluating research to be used in the construction and support of arguments and main points through developing full sentence outlines.	884	703	79.52%

Clicking on Assessment Methods & Criteria and Reflections will pull up all comments entered by faculty during the reporting period.

Clicking on Sections Reporting and Sections Not Reporting lists the specific Reporting and Non-Reporting sections.

Assessment Data for Program Reports is based on Program Maps developed by department faculty. Course SLO and PLO alignment from the program maps has been input into the SLO Cloud and automatically populates the Program Reports based on the mapping.

SLO CLOUD San Bernardino Valley College

Submission Form | 
 Reports | 
 Exports | 
 Logout

### Program Summary Report

Year:

Period:

Program:

Tools -

#### Program SLOs

Note: Program SLO Summary Evaluation Form is available..

Note: These contain duplicated head count. A student can be counted once for each statement in a SLO, and for each class they took.

#	SLO Statement	# of Students Assessed	# of Students who Met SLO	% of Students who Met SLO
1	Diagnose and repair malfunctions in electrical systems and components	314	220	70.06%
2	Disassemble, inspect and repair parts, which are reusable in a manner consistent with accepted trade practices and assemble a diesel engine in accordance with manufacturer instructions and specifications	303	249	82.18%
3	Perform all necessary adjustments, demonstrate sequential steps taken in diagnosing heavy-duty truck brake systems and remove and replace components in a manner consistent with industry standards	636	501	78.77%
4	Diagnose heavy-duty truck suspension and steering systems and remove and replace components in a manner consistent with industry standards	636	501	78.77%
5	Diagnose the fuel system and tune-up problems using various electronic test equipments and remove and replace components in a manner consistent with industry standards	162	133	82.10%
6	Perform routine servicing of heavy-duty vehicles by evaluating tire and other equipment conditions and successfully and safely removing and replacing tires and other equipment in a manner consistent with industry practices and safety standards	135	110	81.48%
7	Troubleshoot a truck electrical system failure, diagnose the cause and correctly repair that failure in accordance with accepted industry standards	314	220	70.06%
8	N/A			

8 Assessment Methods & Criteria

23 Reflection(s)

28 Section(s) Reporting

5 Section(s) Not Reporting





# Appendix C: Summary Evaluation Forms

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## Course SLO Summary Evaluation Form

Division:

Semester Assessed:

Lead Evaluator:

Department:

Next Assessment:

Participants:

Course:

Student Learning Outcome	
SLO Assessment Methodology	
Criteria – What is “good enough”?  Rubric	Click here to enter text.
What % of students met the criteria? Is this % satisfactory?	Click here to enter text.
Were trends evident in the outcomes? Are there learning gaps?	Click here to enter text.
What content, structure, strategies might improve outcomes?	Click here to enter text.
Will you change assessment method/criteria?	
Evidence of Dialogue (Attach representative sample of dialogue)	<p><i>Check any that apply</i></p> <p><input type="checkbox"/>E-mail Discussion with <input type="checkbox"/>FT Faculty <input type="checkbox"/>Adjunct Faculty.</p> <p>Date(s):</p> <p><input type="checkbox"/>Department Meeting. Date(s): <input type="checkbox"/>Division Meetings. Date(s):</p> <p><input type="checkbox"/>Campus Committees. Date(s):</p> <p>(ex: Program Review; Curriculum; Academic Senate; Accreditation &amp; SLOs)</p> <p>SLO Dialogue focused on:</p> <p>Click here to enter text.</p>

Will you rewrite the Course SLO?	Click here to enter text.
Response to Student Learning Outcome evaluation and assessment?	<input type="checkbox"/> Professional Development <input type="checkbox"/> Intra-departmental changes <input type="checkbox"/> Curriculum action <input type="checkbox"/> Requests for resources  Click here to enter text.

## Program Summary Report Form

Division:

Semester Assessed:

Lead Evaluator:

Program:

Next Assessment:

Participants:

Program Learning Outcome	
Assessment Methods	
Criteria – What is “good enough”?  Rubric	Click here to enter text.
What % of students met the criteria? Is this % satisfactory?	Click here to enter text.
Were trends evident in the outcomes?  Are there learning gaps?	Click here to enter text.
What content, structure, strategies might improve outcomes?	Click here to enter text.
Will you change assessment method and or criteria?	
Evidence of Dialogue  (Attach representative samples of evidence)	<p><i>Check any that apply</i></p> <p><input type="checkbox"/>E-mail Discussion with   <input type="checkbox"/>FT Faculty   <input type="checkbox"/>Adjunct Faculty   Date(s):</p> <p><input type="checkbox"/>Department Meeting. Date(s):   <input type="checkbox"/>Division Meetings. Date(s):</p> <p><input type="checkbox"/>Campus Committees. Date(s):</p> <p>(ex: Program Review; Curriculum; Academic Senate; Accreditation &amp; SLOs)</p> <p>SLO Dialogue focused on:</p> <p>Click here to enter text.</p>

Will you rewrite the SLO?	Click here to enter text.
Response to program outcome assessment?	<input type="checkbox"/> Professional Development <input type="checkbox"/> Intra-departmental changes <input type="checkbox"/> Curriculum action <input type="checkbox"/> Requests for resources and/or services  Click here to enter text.

## Program SAO Summary Evaluation Form

Division:

Semester Assessed:

Lead Evaluator:

Program:

Next Assessment:

Participants:

Service Area Outcome Statement	
Strategic Initiatives aligned with the SAO.	<input type="checkbox"/> Access <input type="checkbox"/> Student Success <input type="checkbox"/> Facilities <input type="checkbox"/> Communication, Culture, & Climate  <input type="checkbox"/> Leadership & Professional Development <input type="checkbox"/> Effective Evaluation and Accountability
SAO Assessment Tool	Program Review Process  Number of transactions
Criteria – What is “good enough”?  Rubric	Click here to enter text.
What are the results of the assessment? Are the results satisfactory?	Click here to enter text.
Were trends evident in the outcomes? Are there gaps?	Click here to enter text.
What content, structure, strategies might improve outcomes?	Click here to enter text.
Will you change evaluation/assessment method or criteria?	
Evidence of Dialogue (Attach representative samples of evidence)	<i>Check any that apply</i>  <input type="checkbox"/> E-mail Discussion with <input type="checkbox"/> FT Faculty <input type="checkbox"/> Adjunct Faculty <input type="checkbox"/> Staff Date(s):  <input type="checkbox"/> Department Meeting. Date(s): <input type="checkbox"/> Division Meetings. Date(s):  <input type="checkbox"/> Campus Committees. Date(s): (ex: Program Review; Curriculum; Academic Senate; Accreditation & SLOs)  SLO Dialogue focused on: Click here to enter text.
Will you rewrite the SAOs?	Click here to enter text.

Response to program outcome evaluation and assessment?  
How were/are results used for program improvement?

- Professional Development     Intra-departmental changes
- Curriculum action     Requests for resources and/or services
- Program Planning /Student Success

[Click here to enter text.](#)

## *Appendix D: Learning Outcomes Rubric*

SLOs and PLOs are reviewed by the Accreditation and SLO Committee (ALSO) as part of the Curriculum process. Discipline faculty are the content experts; thus the purpose of the ASLO Committee review is not to question the validity of an outcome but to ensure the outcomes include the following four elements using the following rubric.

<b>Outcomes Elements</b>	<b>YES</b>	<b>NO</b>
SLO is student focused		
SLO uses action verbs from Blooms Taxonomy		
SLO is measurable		
SLO is aligned with Course Objectives and Course Content		

### **Active Verbs for Writing Learning Outcomes—Bloom's (1956) Taxonomy**

#### **Knowledge**

Arrange, define, describe, duplicate, enumerate, identify, indicate, know, label, list, match, memorize, name, read, recall, recognize, record, relate, repeat, reproduce, select, state, view, underline

#### **Comprehension**

Classify, cite, convert, defend, describe, discuss, distinguish, estimate, explain, express, generalize, give, examples, identify, indicate, infer, locate, paraphrase, predict, recognize, report, restate, review, rewrite, select, suggest, summarize, tell, trace, translate, understand (note: SLO best practices discourage using *understand* or *understanding* as an action verb)

#### **Application**

Act, administer, apply, articulate, assess, change, chart, choose, collect, compute, construct, contribute, control, demonstrate, determine, develop, discover, dramatize, employ, establish, extend, give examples, illustrate, implement, include, inform, instruct, interpret, investigate, prepare, preserve, produce, project, provide, relate, report, schedule, ship, show, sketch, solve, teach, transfer, translate, use, utilize, write

#### **Analysis**

Analyze, appraise, break down, calculate, categorize, compare, contrast, correlate, criticize, debate, determine, diagram, differentiate, discriminate, distinguish, examine, experiment, focus, identify,



illustrate, infer, inspect, inventory, limit, outline, point out, prioritize, question, recognize, relate, select, separate, subdivide, solve, test

### **Synthesis**

Adapt, anticipate, arrange, assemble, categorize, collaborate, collect, combine, communicate, compile, compose, construct, create, design, devise, develop, explain, express, facilitate, formulate, generate, incorporate, individualize, initiate, integrate, model, modify, negotiate, organize, perform, plan, prepare, produce, propose, rearrange, reconstruct, reinforce, relate, reorganize, revise, set up, structure, substitute, validate, write

### **Evaluation**

Appraise, argue, assess, attach, choose, compare, conclude, contrast, criticize, critique, decide, defend, enumerate, estimate, evaluate, grade, interpret, judge, justify, measure, predict, rate, reframe, revise, score, select, support, value