## College of the Siskiyous:

# Student Learning Outcomes and Assessment Manual for Faculty

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## Acknowledgments

This manual relies upon the *Outcome Primers Series 2.0*, published by The Learning Organization (2017), for its general approach to outcomes and assessment. The SLO Committee at College of the Siskiyous wishes to thank one of the authors of this series, Dr. Lori Sours, for her assistance in the development of this manual.

#### Overview

College of the Siskiyous (COS) is a small, rural California Community College accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC). ACCJC standard II.A.3 mandates that "The institution identifies and regularly assesses learning outcomes for courses, programs, certificates and degrees using established institutional procedures." This manual establishes those procedures.

Several key factors impact College of the Siskiyous' approach to outcomes assessment. Perhaps the most significant of these is the college's small size. Many academic programs at COS are staffed by one full-time faculty member. Consequently, in order to fully comply with ACCJC standard I.B.1,¹ faculty from multiple disciplines must collaborate to create a sustained and substantive dialogue regarding outcomes assessment in an effort to continually improve the quality of student learning. The small size of the college also impacts the number of students who complete specific degree programs annually. Consequently, obtaining a valid data set for students enrolled in a particular degree program could take many years.

The second factor impacting the college's approach to outcomes assessment is the implementation of Guided Pathways in the California Community College System. As the college identifies and establishes particular curricular pathways for students at COS, this provides faculty with the opportunity to refine program-level outcomes associated with each pathway and to collaborate in efforts to assess student learning at the course and program level in each pathway.

The central premise of outcomes assessment at College of the Siskiyous is "backwards design." Specifically, faculty should begin the outcomes-assessment process by articulating program-level outcomes, mapping their programs, and then identifying key assessment points within their programs. Since programs consist of courses, the actual assessments will occur in the context of specific courses. However, these assessments should ultimately allow faculty to determine the extent to which students are achieving the program-level outcomes.

<sup>&</sup>lt;sup>1</sup> ACCJC standard I.B.1 states, "The institution demonstrates a sustained, substantive and collegial dialog about student outcomes, student equity, academic quality, institutional effectiveness, and continuous improvement of student learning and achievement."

#### **Definitions of Key Terms**

**Program:** a series of learning experiences (usually, but not always, consisting of specific courses) that culminate in the achievement of program-level outcomes. Programs frequently, but not always, culminate with the completion of a particular degree or certificate.

**Program Map:** a visual depiction of the student's journey through a program. The map should include all of the courses, including prerequisites, that students complete in order to achieve the program-level outcomes. The map should also identify key assessment points in the program.

**Student Learning Outcome (SLO):** a clearly articulated statement of what students will be able to DO with what they have learned after completing the course or program. Note that student learning outcomes are distinct from specific and discreet competencies. Outcomes are concise yet specific statements of what students can DO with what they have learned, and they emphasize what connects the specific competencies.

**Program Outcome Guide (POG):** a one-page plan focusing on intended learning outcomes in a program and working backwards to determine essential content for that program.

**Course Outcome Guide (COG):** a one-page plan focusing on intended learning outcomes in a course and working backwards to determine essential content for that course.

**SLO Assessment Cycle:** A continuous cycle of assessing student learning outcomes and making adjustments to courses and programs in an effort to continuously improve the quality of student learning.

**Direct Evidence:** evidence of student learning directly observed and evaluated by the instructor of the course(s). This includes, but is not limited to, tests, papers, quizzes, performances, and student presentations.

**Indirect Evidence:** evidence of student learning obtained from sources other than the instructor of the course(s). This includes students' performance in other classes (whether at COS or other institutions), students' performance on state-mandated tests (for example, the NCLEX exam in nursing), employer-satisfaction surveys, and surveys of students themselves.

#### **Student Learning Outcomes: Types and Articulation**

To comply with the aforementioned ACCJC standard II.A.3, all courses must have student learning outcomes articulated in both the Course Outline of Record (COR) and course syllabi distributed to students. Furthermore, all programs must articulate at least one program-level outcome. As defined previously, it is the program-level outcome(s) that establish that a program exists.

Course-level outcomes are regularly assessed by instructors at COS in the process of teaching: an instructor must assess student learning throughout the course (through tests, quizzes, papers, performances, presentations, etc.) in order to determine a course grade for a student. The course grade may be regarded as the student's aggregate achievement of course-level outcomes,<sup>2</sup> particularly in order to disaggregate SLO data for subpopulations of students.<sup>3</sup> However, the key outcomes-assessment process at COS involves program-level outcomes.

Program-level outcomes are assessed as faculty map their particular programs and identify key assessment points within that program. While the assessments will occur in the context of specific courses, the objective is to determine the extent to which students are learning the program-level outcomes. Since learning is a process, each program must identify MORE THAN ONE assessment point within a program. Faculty will collaborate with colleagues in their areas and/or with the SLO committee in their development of program maps, their identification of key assessment points, and their creation of assessment activities for these assessment points.

Regarding the actual articulation of outcomes, outcomes at both the course and program level, as stated previously, should consist of clearly articulated statements of what students will be able to DO with what they have learned after completing the course or program. Instructors should rely upon Bloom's taxonomy when articulating outcomes. However, the outcomes should not identify discreet competencies but rather identify the connection between those

<sup>&</sup>lt;sup>2</sup> The CA Community College System explicitly prohibits using attendance as a method of grading; therefore, course grades must be based on the work that students actually perform in the course. CA Title 5 section 55002.a.2.A, states, "'The grade is based on demonstrated proficiency in subject matter and the ability to demonstrate that proficiency, at least in part, by means of essays, or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrated by students.' Students must be assessed on their ability to demonstrate proficiency in meeting the course objectives. Attendance is not part of a course subject matter or discipline-specific skill and therefore may not be separately assessed as part of the course curriculum."

<sup>&</sup>lt;sup>3</sup> ACCJC standard I.B.6 mandates that "The institution disaggregates and analyzes learning outcomes and achievement for subpopulations of students."

competencies so that the outcomes are concise yet specific statements of what students can DO with what they have learned. Of course, students must possess sufficient knowledge to effectively do whatever the course or program is designed to teach; this knowledge is the course content. Instructors are encouraged to develop COGs for courses to insure that course content aligns with the intended SLOs. Please note that the institution will support flex workshops and trainings on these principles. (See Appendix A for a sample COG.)

#### Types of Outcomes Assessment

Three types of outcomes assessment exist:

- Assessment to assist. This type of assessment occurs when students are observed and
  their work is reviewed before it has been finished. Some examples include instructor
  response to a student's preliminary draft of a paper before a final draft of that paper is
  ready to be submitted for a grade, or a project proposal evaluated by the instructor
  before implementation.
- 2. Assessment to advance. This type of assessment is most easily correlated with grading, whether that grade is for a particular assignment or activity or the overall grade for a course. This type of assessment determines whether or not a student is ready to advance beyond the particular course or program. The advancement may be to the next COS course (in a sequence of courses), to pursue a degree at a four-year college or university, or to begin working in a particular field. It is important to remember that subsequent educational institutions, as well as some employers, will use the course grades on students' transcripts to determine if students have learned sufficiently in their courses at COS.
- 3. Assessing to adjust. This type of assessment occurs at the end of each year of the assessment cycle and helps "close the loop" and reflects the college's efforts to achieve "continuous improvement of student learning and achievement" identified in ACCJC standard I.B.1. Faculty use the information gleaned from the SLO assessment process to make changes to courses and programs in an effort to improve the quality of student learning.

Faculty may use the first and second types of assessment in their efforts to document outcomes achievement in a program. The first type lends itself to qualitative data (such as a narrative describing the level of student learning, or the difficulties students are encountering); the second type lends itself to quantitative data (such as a certain number of students achieving the SLO). However, at least one of the key assessments must be assessment to advance. Faculty may also use direct or indirect evidence of SLO achievement; however, at least one of the key assessments for a program must utilize direct evidence (as described on page 3). The final step in the process is assessing to adjust, to "close the loop" in an effort to continuously improve the quality of student learning.

#### The SLO Assessment Process: First Cycle

This manual delineates the first cycle of the college's SLO assessment process, which focuses on degree-program outcomes for Career and Technical Education (CTE) discipline, outcome(s) for Counseling services, outcome(s) for Library services, and general education outcomes for disciplines in the Liberal Arts and Sciences (LAS) division. Once the college has fully implemented Guided Pathways and identified the LAS degree programs that culminate the various pathways, subsequent cycles will assess degree-program outcomes in the LAS division.

- In the Career and Technical Education (CTE) division of the college, each CTE program will articulate at least one program-level outcome that can be assessed.
- Counseling services will articulate at least one program-level outcome that can be assessed.
- Library services will articulate at least one program-level outcome that can be assessed.
- In the Liberal Arts and Sciences (LAS) division of the college, as well as in non-LAS disciplines that have linked courses to general education outcomes, the following general education program outcomes have been established:
- 1. Within the framework of the discipline's major principles and methods of inquiry, determine whether an observation or experimental result is consistent with a scientific explanation for a natural phenomenon and effectively articulate that analysis.
- 2. Demonstrate the ability to apply and critically assess social science research, perspectives, principles and methods in understanding social processes.
- 3. Analyze and appreciate works of philosophical, historical, literary, aesthetic, and cultural importance through the ages and in different cultures.
- 4. Students will demonstrate an understanding of at least one principle form of artistic expression and the creative processes inherent therein.
- 5. Demonstrate effective reading and writing skills in collecting, evaluating, organizing, and presenting information and ideas.
- 6. Apply knowledge of communication theory, practices, and media to communication events.
- 7. Students should be able to setup, manipulate, graph, solve, or apply standard algebraic expressions and equations.

- 8. Develop clear and precise expressions of ideas to analyze common logical errors while using language and logic through inductive and deductive processes
- 9. Demonstrate knowledge of healthy life choices and the potential risks and benefits of physical activity.
- 10. Demonstrate how knowledge of finances and technology impact decisions made in daily life.
- 11. Compare and contrast the experience of a historically under-represented group with that of the dominant culture and demonstrate an understanding of social, personal, or historical biases and prejudices.

By the end of the initialization year (academic year 2018-2019) the following tasks shall be completed:

- Each CTE program, Counseling services, and Library services shall have at least one
  program-level outcome articulated (or will have completed any refinements to current
  program-level outcomes), and any refinements to the general education outcomes
  listed above shall be completed.
- 2. Each CTE program, Counseling services, and Library services shall complete a Program Outcome Guide (POG) and program map by the end of the 2018-2019 academic year. All disciplines that have linked courses to general education outcomes shall collaborate to create a Program Outcome Guide for each general education outcome, and shall create a program map for each general education outcome. The program map must include all courses that are linked to the general education outcome. (See Appendix B for a sample POG, and Appendix C for a sample program map.) Maps for Counseling and Library services shall identify the key services provided to students during their interactions with these areas.
- 3. The program maps for CTE programs, Counseling services, Library services, and each general education outcome must identify at least two key assessment points FOR EACH DISCIPLINE that is included in the map. These assessment points will occur within specific courses in that program, or at specific interaction points within Counseling and Library services.
- 4. Faculty shall collaborate to begin creating the two key assessments for program-level outcomes. (The actual assessments will be implemented in the subsequent academic years.) Note that one of the assessments must include direct evidence of student learning, and one of the assessments must be assessment to advance.

Starting with the first year of full implementation (academic year 2019-2020), designated as Year 1 in the chart below, the following process shall be followed for each CTE program,

Counseling services, Library services, and each discipline that has linked its courses to general education outcomes:

Year	Task on Planning Day at	Task on Planning Day at
rear	beginning of year.	end of year
Year 1	Finalize 1 <sup>st</sup> key assessment and	Analyze results of 1st key
(2019-2020)	when it will be implemented (actual	assessment. Complete Form
	assessment is implemented during	for Annual Program
	academic year). Complete Form for	Outcomes Assessment
	Annual Program Outcomes	Results (Appendix E).
	Assessment Plan (Appendix D).	
Year 2	Make necessary adjustments to	Analyze results of 2 <sup>nd</sup> key
(2020-2021)	program in response to results of	assessment. Complete Form
	last year's assessment; finalize 2 <sup>nd</sup>	for Annual Program
	key assessment and when it will be	Outcomes Assessment
	implemented. Complete Form for	Results (Appendix E).
	Annual Program Outcomes	
	Assessment Plan (Appendix D).	
Year 3	Make necessary adjustments to	Analyze results of 1st key
(2021-2022)	program in response to last year's	assessment. Complete Form
	assessment; confirm 1st key	for Annual Program
	assessment by implementing it	Outcomes Assessment
	again. Complete Form for Annual	Results (Appendix E).
	Program Outcomes Assessment	
	Plan (Appendix D).	
Year 4	Make necessary adjustments to	Analyze results of 2 <sup>nd</sup> key
(2022-2023)	program in response to last year's	assessment. Complete Form
	assessment; confirm 2 <sup>nd</sup> key	for Annual Program
	assessment by implementing it	Outcomes Assessment
	again. Complete Form for Annual	Results (Appendix E).
	Program Outcomes Assessment	
	Plan (Appendix D).	

#### **First Cycle Notes**

Each program-level outcome must be assessed through at least two key assessment points in each discipline throughout the program, at least one of the key assessments must contain direct evidence of student learning, and at least one of the key assessments must be assessment to advance.

CTE programs will have program outcomes that are very specific to that program. Since many CTE programs are staffed by one full-time faculty member, CTE faculty that have no other full-time faculty in the program will collaborate with the SLO Committee to map programs, identify assessment points, and develop assessments or identify existing assessments for use in the SLO assessment process. Library services will also collaborate with the SLO Committee to map its program, identify key assessment points, and develop assessments or identify existing assessments for use in the SLO assessment process.

However, in disciplines or areas with multiple faculty, particularly Nursing, Physical Education, Counseling, and many of the LAS disciplines, all faculty in disciplines that link to the program outcome will collaborate in the process of mapping, identifying assessment points, and developing assessments (or identifying existing assessments for use in the SLO assessment process). Particularly in the LAS disciplines, the general education program outcomes will be achieved through multiple disciplines. Therefore, faculty in these disciplines should develop some commonality in their assessments at the designated key assessment points. For example, faculty who have linked their courses to one general education outcome could collaborate on the creation of a common rubric to assess student performances. Faculty in other disciplines that have linked to a general education outcome might design an assessment that has some commonality – one that drives toward the program outcome – while it still pertains to the specific discipline and course that one is teaching.

A standing SLO Committee, established by the Academic Senate, shall be available to assist faculty in these processes.

#### **Documentation of Outcomes Assessment**

Faculty may use assessment-to-assist or assessment-to-advance in their documentation of outcomes assessment. However, at least one of the key assessments created for each program must be assessment-to-advance so that some quantitative data exists (in addition to qualitative data). Furthermore, as stated previously, at least one of the key assessments must include direct evidence of student learning.

It will be the responsibility of full-time faculty to develop assessments and analyze the results of those assessments. Part-time faculty will be provided with common rubrics or assessment instruments by full-time faculty and will be required to utilize these materials to participate in the SLO assessment process. However, the documentation and analysis of assessment results will be performed by full-time faculty. Additionally, course grades, which are a valid method of course-level assessment to advance, are submitted by all full-time and part-time faculty at the college and may be utilized as evidence of aggregate course-level SLO assessment, particularly to disaggregate SLO achievement by subpopulation.

For several disciplines that are staffed exclusively by part-time faculty, the college shall provide compensation to select part-time faculty to participate in the SLO assessment process. The amount of compensation shall be negotiated between the District and the COS Faculty Association before the part-time faculty begin this work.

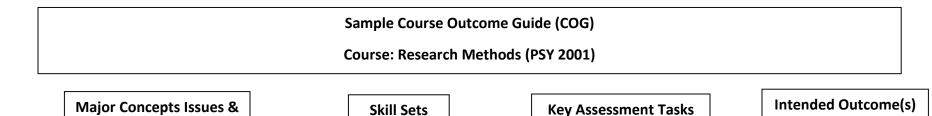
The Program Outcome Guide, the program map, the Form for Annual Program Outcomes Plan, and the Form for Annual Program Outcomes Assessment Results shall be submitted after their completion to the SLO Committee for review. All these materials shall be housed by the college's Office of Institutional Research.

If a program has a faculty coordinator who receives release time, the faculty coordinator shall be responsible for insuring completion of the SLO assessment process. In the absence of a faculty coordinator, the appropriate director or dean shall be responsible for insuring that the SLO assessment process has been completed.

#### **Assessment of the SLO Assessment Process**

In the third year of the SLO assessment cycle (2021-2022), the SLO Committee, with the assistance of Institutional Research, shall prepare an anonymous survey for faculty to complete during the academic year. The results of the survey shall be disseminated to all faculty, and faculty will then meet to discuss revisions to the SLO assessment process during the fourth year of the SLO assessment cycle.

#### APPENDIX A



#### **CONCEPTS**

- ✓ Principles of the Scientific Method
- ✓ Descriptive Research Methods
- ✓ Correlation Research Methods
- ✓ Experimental Research Methods
- ✓ Ethical Practices
- ✓ Statistical Procedures
- ✓ APA format
- ✓ Scientific Manuscript Writing
- ✓ Evaluation of Sources
- ✓ Librarian Services
- ✓ Identifying Variables
- ✓ Theories
- ✓ Hypotheses
- ✓ Operational Definitions
- ✓ Informed Consent
- ✓ Debriefing
- ✓ Scales of Measurement

- Write papers using APA format
- Evaluate and integrate scientific research on a topic in a written paper
- Design and conduct research adhering to ethical standards and standard research practices
- Analyze data using appropriate statistical methods
- Be able to write a scientific manuscript

- Using APA format, students will complete a literature review that summarizes and evaluates major theories and research findings related to a topic
- 2. Students will create and conduct a research project. Students will generate a written report using APA practices and present their results in poster or PowerPoint format

- Critically evaluate research reports and synthesize a body of research findings
- 2. Explain general research designs, experimental and non-experimental methods, and standard research practices; select appropriate research designs to test hypotheses
- 3. Employ the APA style in writing manuscripts

#### **Sample Program Outcome Guide (POG)**

#### **Social and Behavioral Sciences General Education**

**Major Concepts & Issues** 

**Skill Sets** 

**Key Assessment Tasks** 

Intended Outcome(s)

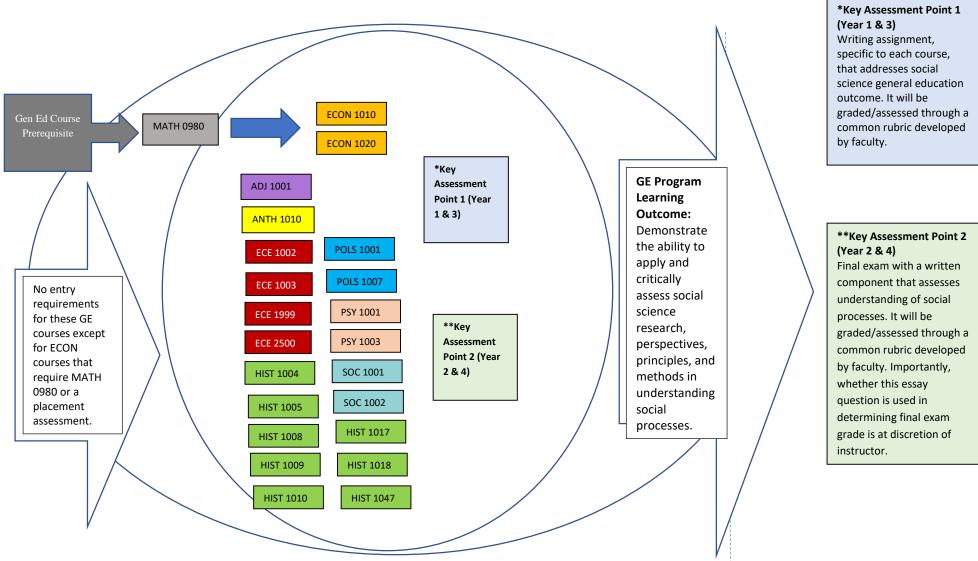
#### **CONCEPTS**

- ✓ Theoretical Orientations of Appropriate Discipline
- ✓ Source Analysis
- ✓ Review of Relevant Research in Appropriate Discipline
- Procedures and Materials in Research Methods
- ✓ Applicability of Types of Research
- ✓ Recognized Databases and Evaluation of Research Quality
- ✓ History and Current State of Discipline

- Critical analysis, source evaluation, and argumentation
- Compile and analyze data
- Recognition and application of research methods
- Write papers using appropriate documentation style

- Written, oral, and/or visual report that applies and critically assesses social science research, perspectives, principles, and methods.
- Written component on the final exam that assesses understanding of social problems.
- 1. Demonstrate the ability to apply and critically assess social science research, perspectives, principles, and methods in understanding social processes.

APPENDIX C
Social and Behavioral Sciences General Education Map



Each course from each discipline will go through the Key Assessment Points 1 and 2. If a discipline has multiple courses in the GE pattern, the instructor will rotate these courses so they go through the Key Assessment Points 1 and 2 at varying times, provided the course is taught within the four-year assessment cycle.

### **Appendix D:**

## Form for Annual Program Outcomes Assessment Plan

(to be completed by Planning Day at beginning of academic year)

1. Identify (v	write down) the program-level outcome that will be assessed this year:
2. Identify al year:	l courses in all disciplines in which the key assessment will be implemented this
	he key assessment that will be implemented in courses listed above. ion may be attached to this form.)
3.A.	Identify if the key assessment consists of direct or indirect evidence. Note that at least one of the key assessments in the cycle must consist of direct evidence of student learning.
3.B.	Identify if the key assessment is assessment to assist or assessment to advance. Note that at least one of the key assessments in the cycle must consist of assessment to advance.
implemented	he implementation plan: when, during the semester, the key assessment will be in each course, and how the data will be collected. Note that all data must be available for analysis by Planning Day at the end of the academic year.

## Appendix E:

## Form for Annual Program Outcomes Assessment Results

(to be completed on Planning Day at end of academic year)

1. Io	dentify (write down) the program-level outcome that was assessed this year:
2. Id	dentify all courses in all disciplines in which the key assessment was implemented this year:
3. P	Provide the results of the assessment data. (Documentation may be attached to this form.)
stud	Provide <u>analysis</u> of the results identified above. Specifically, what do they reveal about ent learning regarding this outcome? Note that the objective is to improve the quality of ent learning.
	Describe any changes that will be implemented at the course or program level to improve ity of student learning regarding this program-level outcome.