



## Student Learning Outcomes Assessment Handbook

### Overview

At Napa Valley College, departments and programs are continually engaged in assessment of student learning outcomes to improve teaching and learning. This handbook, developed by the Faculty Business Committee, provides information and resources to help faculty, staff, and administrators work collaboratively on the development and use of assessment results to improve college programs and services.

Student learning outcomes (SLOs) are defined as the 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. SLOs provide a statement of the highest level of learning and focus on essential skills or knowledge.

Assessment documentation at NVC occurs on an ongoing cycle of every 2-6 years as determined by instructional departments, academic support, and appropriate student services areas. A department's assessment plan is set at the beginning of the cycle and documented, along with a yearly review of the data to ensure institutional effectiveness in response to evolving student needs. Napa Valley College is committed to optimizing student success as reflected in our mission and values "where students are first and foremost in everything we do."



## Roles and Responsibilities

Learning outcomes at the course level are regularly assessed to promote collaboration and improve instruction across the institution. Assessment helps facilitate changes to curriculum, inspires professional development, encourages documentation of areas where new needs have emerged, initiates program-wide dialogue, connects instructors with shared approaches to learning, and guides college planning.

**Departments** develop and communicate their 2-6 year assessment plan to the college. A department's assessment plan is set at the beginning of the cycle and documented yearly.

**Program Coordinators** play a lead role in creating and updating the department's assessment plan, communicating with faculty in their programs about assessment needs, facilitating assessment instruments and dialogue, reviewing assessment data for yearly planning and 3-year program review, and staying current in assessment practices and equitable methods.

**All Faculty** are responsible for assessing SLOs, recording results, and participating in dialogue.

### **Learning Outcomes Assessment Coordinator**

To support institutional assessment practices, NVC has a Learning Outcomes Assessment Coordinator (LOAC). The LOAC assists program coordinators with maintaining and implementing each department's assessment plan. A communications schedule facilitates regular contact between NVC program coordinators, deans, and department faculty to coordinate data collection and entry. The LOAC offers multiple workshops each semester, highlighting new and successful assessment approaches and

providing orientations on TracDat, in addition to a weekly drop-in hour.

### **Learning Outcomes Assessment Website**

Additionally, the LOAC provides assessment guidance via a Learning Outcomes Assessment website. Tools such as templates, rubrics, and videos are provided, along with suggestions for how to write effective student learning outcomes, develop appropriate assessment methods, establish criteria for success, report data, formulate action plans, and finalize the assessment cycle.

Results from Institutional Learning Outcomes and General Education Learning Outcomes assessment are also posted to the website to facilitate greater awareness of continuous improvement at NVC for the campus community and the public.

### **College Reporting System (TracDat)**

Student learning outcomes, methods of assessment, success criterion, results and action plans at the course-level and the program-level are officially recorded online in the reporting system TracDat (Nuventive). Faculty assessing a single section are encouraged to input results directly; assessments that involve multiple sections are aggregated. The Learning Outcomes Coordinator, program coordinators, and division secretaries assist with entering data reports into TracDat.

## Communications Schedule

NVC coordinators, deans, and faculty regularly communicate to facilitate resources and ensure assessment is ongoing for courses and programs. The schedule below illustrates timelines for successful data gathering and reporting.

Fall	Contact Dates
Coordinators send out templates	October 1
Individual Faculty return templates	November-December
Data is entered into <u>TracDat</u>	December-January
<u>Coordinators</u> aggregate	February 1

Spring	Contact Dates
Coordinators send out templates	March 1
Individual Faculty return templates	April-May
Data is entered into <u>TracDat</u>	May-June
<u>Coordinators</u> aggregate	September 1

## Department/Program Schedules

NVC assesses student learning outcomes among instructional programs and academic and student support services according to established cycles. Each instructional department determines a plan for assessing course and program learning outcomes (See examples, **Appendix A**). Each plan outlines a cycle that ranges from two to six years. Academic and student support services develop timelines for assessment, structured around a four-year cycle (See example, **Appendix B**).

## Developing or revising Learning Outcomes at the Course-Level (CLOs)

All courses at NVC have Student Learning Outcomes listed on the Course Outline of Record, which appears in the CourseLeaf management system. The SLOs of a course are usually developed through collegial discussion among faculty who create, revise, and/or teach a course. When writing SLOs:

- State what a learner will be able to do as a result of participation in the course, program, and/or degree or certificate.
- Use action terms: analyze, solve, create, record, etc. Consider Bloom's Taxonomy of terms to promote multiple levels of cognition.
- Ask students to produce something - papers, projects, portfolios, demonstrations, performances, art works, exams etc. – that applies what they have learned.
- Think beyond the classroom and consider the skills students will need to be successful in their academic or professional next steps.

## Assessment Methods

Effective assessment occurs as part of the course's regular activities – tests, projects, papers, or demonstrations of skills that are normally used for grading students.

When determining methods, first identify what assessment tools are currently being used to evaluate student performance. Assessment tools for courses shall be consistent with existing grading and evaluations methods (on the COR). Discipline faculty can then confer and agree upon common assessment tools to be used in courses with multiple sections.

## Examples of Assessment Methods

Midterm exams, final exams, projects, presentations, performances, surveys, and written assignments such as research papers, essays, critiques are sample activities that can provide measurable evidence of student achievement.

Math 120, Calculus, SLO 3: Evaluate definite and indefinite integrals using the Fundamental Theorem of Calculus.

- Method: Test/Quiz. Each instructor will collect data from 3 questions of varying degrees of difficulty.

Music 128, Audition Techniques, SLO 1: Present an audition for peer, academic and professional review.

- Method: Presentation/Performance. Student final audition performance scored on a 1- 5, six-trait rubric.

## Criteria for Success

Criteria refers to the performance standards that determine whether or not a student has achieved a given level of knowledge or skill proficiency, i.e. the benchmark indicating when a student has achieved the knowledge, skill, or ability the SLO describes.

## Examples of Criteria:

- Using a 100-point analytic rubric, at least 70% of students will earn a minimum of 70 points on the final essay.
- At least 70% of the class will correctly answer each of the three common multiple-choice questions that are embedded in every section's final exam.

## Summarizing Assessment Results

Results might confirm effective instruction and/or suggest areas where changes in teaching or materials might improve student learning. Faculty may consider in what ways expectations were exceeded and identify areas where the expected outcome for success was not met. Possible questions to pose: What issues and needs were revealed? How do the results compare to any baseline or benchmark data previously collected? Were there any surprising or unexpected findings? Did the assessment work, and if not, what needs to be revised? What changes to pedagogy are warranted? What additional resources are needed to implement these changes and others?

### Sample Results

#### **English 120, Reading and Composition**

**SLO 1:** Think, read, and write critically about a variety of ethical, civic, and intercultural issues.

**Method:** Writing. Students will write an essay in response to a reading on an ethical, civic, or intercultural issue.

**Quantitative:** 80% of students received a grade of 70 or higher on the essay.

**Qualitative:** The balance between each student's voice and the use of source material was strong in most essays. Research was well-analyzed, with some synthesis showing areas of agreement on ethical issues between sources. Students showed creativity in their ideas and competency in their ability to sustain a thesis throughout. Students struggled in presenting a variety of sources. They are likely not expanding their online searches wide enough to pull together diverse and effective support material.

## Action Plans and Closing the Loop

By analyzing the data, crafting an action plan, and implementing changes, faculty can help all students reach or exceed the benchmark established in the success criteria. Some action plan possibilities that can lead to program improvements include: conduct further assessment, use new or revised teaching methods, develop new evaluation methods, plan purchase of new equipment or supplies, make staffing changes, engage in professional development, revise course sequence, prerequisites, or course outlines of record.

Closing the loop indicates that by engaging in a continuous assessment process of identifying outcomes and assessing learning, NVC can use those results to make ongoing improvements at the course, program, and institutional level.

### Sample Action Plan:

- Create a handout to help students practice evaluating sources outside of library databases. Recommend students attend Writing Success Center workshops on searching for sources. Increase classroom access to computer labs where instructors can be present while students search for more diverse materials.

### Resources

For assessment that involves collecting information across several sections, a course-level template (See examples, **Appendix C**) or a course-level rubric (See examples, **Appendix D**) can be useful to facilitate data gathering. Videos on how to fill out a course-level template or rubric and how to enter course-level data into TracDat are available on the Learning Outcomes Assessment website.

## Developing or revising Learning Outcomes at the Program-Level (PLOs)

PLOs are statements (typically four or fewer) that summarize the result of successful completion of a sequence of courses or series of activities. Assessment of student success on program outcomes help the college identify what works well and make improvements when needed. The analysis of data to improve programs and services also provides opportunities for collegial dialogue and collaboration.

PLOs for instructional programs are created by discipline faculty and appear in the college catalog. PLOs for academic support programs and for student services programs that teach students a curricular competency or knowledge are developed by personnel in the area and listed in TracDat. When developing Program Learning Outcomes (PLOs):

- PLOs should provide comprehensive but broad statements about what a student will be able to do, know, perform, think, or demonstrate as a result of successful completion of a sequence of courses or series of activities.
- Think beyond the classroom and consider the skills students will need to be successful in their academic or professional next steps.
- There is not a mandated number of PLOs for programs. Faculty and area personnel should develop as many or as few as the program requires.

Examples of PLO statements:

### **Physics: AS-T Degree**

1. Solve qualitative problems using physics principles.

2. Solve quantitative physics problems correctly using mathematics from the calculus sequence.
3. Operate laboratory equipment to successfully execute physics experiments.

### **Writing Success Center – Academic Support**

1. Students will demonstrate knowledge and awareness of academic writing, formatting, and grammar.
2. Students will engage in conversations to gain understanding of rhetorical situations, develop flexible writing processes, and build confidence in their writing ability.

## Assessing Program-Level Outcomes

By using the results from PLO assessment, programs can implement changes directed at improving student learning. Some examples of PLO Assessment Methods:

- Exit survey or exam
- Focus group
- Evaluate a culminating performance or portfolio
- Evaluate a capstone course
- Tabulate the percentage of students who pass their boards/industry certifications.
- "Upward Assessment": CLO to PLO maps can be utilized to generate reports that show relevant course-level assessment results, identify patterns, and draw conclusions regarding the central question asked by program-level assessment. Faculty analyze and discuss the report, then record important findings.

## Curriculum Mapping

Course alignment maps are used to determine which courses have content that meet each of the program-level outcomes. This allows faculty to develop a holistic picture of how every course in the curriculum fits with other courses and with program goals for student learning. In the example shown, courses are listed across the top and the four program-level outcomes are listed in the left-hand column (the example may not reflect current course content map for this program).

Program (Health & Safety) - Administration of Justice - Mapping: Curriculum									
Legend: (A)Advanced, (I)Introduced, (R)reinforced									
Program Learning Outcomes	ADMJ-130	ADMJ-120	ADMJ-121	ADMJ-122	ADMJ-123	ADMJ-124	ADMJ-125	ADMJ-190	ADMJ-191
AS Degree & AS-T Degree PLO 1		I			R				
AS Degree & AS-T Degree PLO 2 and 911 Dispatcher PLO 1		I		A	R				
AS Degree & AS-T Degree PLO 3			R	R		A	R		
AS Degree PLO 4								I	R

By identifying courses with curriculum that supports the PLOs, faculty can develop course-level outcomes and then develop broader, program-level outcomes. Conversely, faculty can develop outcomes statements for each course that aligns with the PLO.

Departments determine how program-level outcomes align with degrees and certificates to ensure that regular assessment of student progress toward achievement occurs at all levels. Alignment between PLOs and degrees or certificates is represented in the Napa Valley College Catalog.

## Resources

Many NVC departments utilize an upward assessment model, in which outcomes assessment data collected at the course level are used to assess program-level outcomes. A PLO template (See examples, **Appendix E**) is available to aid faculty in summarizing quantitative and qualitative findings, along with action plans. More suggested questions to consider for assessment can be found on the Guiding Dialogue for Course-Level and Program-Level Assessment document (**Appendix F**). A video on how to enter program-level data into TracDat is available on the Learning Outcomes Assessment website.

## Institutional Learning Outcomes and General Education Learning Outcomes

The following Institutional Learning Outcomes and General Education Learning Outcomes were approved by the Academic Senate in February 2020 and approved by the Board of Trustees in November 2020.

### 1. Communication and Critical Thinking

- Create and communicate thoughts, ideas, and information effectively
- Read and interpret college-level texts
- Conduct research and obtain information from reliable sources

### 2. Scientific and Quantitative Inquiry

- Apply scientific principles to measure and observe the physical world
- Understand the relationship between human behavior and the physical environment
- Analyze, evaluate, and synthesize information
- Conduct calculations and solve problems using quantitative reasoning

### 3. Global and Civic Awareness

- Evaluate and apply the principles and methodologies used by the social and behavioral sciences
- Examine issues in their contemporary as well as historical settings and in a variety of cultural contexts

### 4. Intercultural Literacy and Creativity

- Understand artistic expression and the role of art in culture, history, and social critique
- Identify unique features among various cultures
- Describe and demonstrate intercultural competency

### 5. Personal, Academic, and Career Development

- Assess individual knowledge, skills, and abilities
- Set goals and develop plans to achieve them
- Perform work-related functions according to current industry standards and interact with others professionally

## ILO/GELO Inquiry Groups

NVC assesses Institutional Learning Outcomes (ILOs) and General Education Learning Outcomes (GELOs) through inquiry groups comprised of discipline faculty, counselors, academic support, and classified personnel every two years. Inquiry groups discuss student learning outcomes assessment data collected within selected courses associated with each ILO/GELO and identify common needs across the institution. Reports summarize the reflections that emerge from the discussion, outline action plans (including future assessment activities and refinements), and highlight findings that pertain to the whole campus (See example, **Appendix G**).

NVC incorporates data disaggregated by subpopulations into student learning outcomes assessment across the institution, via the General Education pattern. Data is disaggregated and analyzed by subpopulations, including race/ethnicity, foster youth, disability, and veteran status (See example, **Appendix H**).