

Learning Outcomes and Assessment Handbook for Victor Valley College

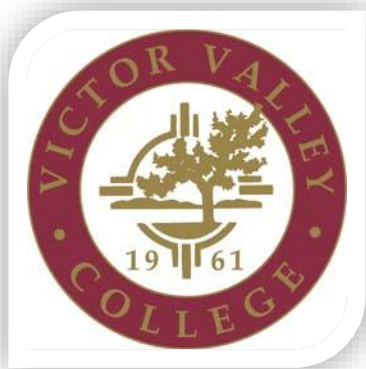


TABLE OF CONTENTS

Introduction.....4

Purpose of The Handbook:..... 4

SLOAC Committee: History, Function, and Charge 4

History:4

Function:4

Charge:.....5

Philosophy of Assessment at Victor Valley College.....5

History of Assessment:..... 5

The Nature of Assessment: 6

The Purpose of Assessment: 6

The Value of Assessment:..... 6

Responsibility for Assessment:..... 6

Limitations of Assessment: 6

Methods of Assessment: 6

Instructional Assessment Processes.....7

The SLO Assessment Process: 7

The PLO Assessment Process:..... 7

The ILO Assessment Process:	7
Guidance on How to Conduct Assessments	8
How to Write SLOs:	8
Criteria for Course- level SLOs:	9
Criteria for Selecting Methods of Assessment:	9
Methods of Assessment:.....	10
Examples of Course SLOs.....	10
How to Write a PLO:	11
Writing Program Outcomes:	11
Defining Programs for the Purpose of Assessment:	11
Writing a Mission Statement for a Community College Program:.....	12
Writing PLOs:	12
Assessing PLOs:	12
HOW TO SUBMIT/REPORT AN SLO ASSESSMENT REPORT:	13
How to Submit/Report a PLO:	19
The Application of Outcomes Assessment to Instructional Program Review and Institutional Planning.....	20
Disaggregation:	20
Description of the SLO Disaggregation Process at Victor Valley College.....	20
Flow Chart for Disaggregation.....	22
ILO Action Plan	22
FAQs for New Faculty	23
Q1. How is assessment different from grades?	23
Q2. Am I required to do an assessment?	23

Q3. Why should I want to assess SLOs/PLOs?24

Q4. Is there a particular assignment that I must use for assessment?24

Q5. Is there a rubric or specified criteria for success that I must use for assessment?24

Q6. What kinds of comments should I put in the “Analytical Narrative” section of the template?24

Q7. Is there a deadline for assessment?25

Q8. How often Are SLOs/PLOs Assessed?.....25

Q9. Which SLOs do I assess?25

Q10. What does “close the loop” mean?25

Q11. What is the difference between the “mapping” of SLOs to PLOs and the “linking” of SLOs to PLOs?25

Q12. Where can I find the SLOs for my course?26

Q13. How do I let my students know about the SLOs related to the course?26

Responsibilities of Department Chairpersons 26

Appendix..... 28

Common Verbs Used for Assessment28

Verbs Requiring Cognitive Outcomes28

Verbs Requiring Affective Outcomes..... 29

Verbs Requiring Psychomotor Outcomes..... 30

References 30

INTRODUCTION

PURPOSE OF THE HANDBOOK:

The purpose of this handbook is to provide guidance with development of SLOs, PLOs, ILOs, and assessment practices. Good assessment requires faculty with expertise and resources to measure and report learning in a variety of courses, under diverse conditions, about students with varied abilities and levels of academic engagement.

Higher education faculty members are hired for their discipline expertise. Assessment is a thoughtful and well-planned part of teaching. Many of us emulate the most effective faculty from our own college experience. But assessing student learning is not new to faculty; we do this every semester as we evaluate student work. However, meeting the assessment expectations delineated in the accreditation standards requires conventions beyond typical grading.

SLOAC COMMITTEE: HISTORY, FUNCTION, AND CHARGE

HISTORY:

The Student Learning Outcome/Assessment Committee (SLOAC) committee was formed as a committee of the Academic Senate and met for the first time in February 2011.

The Student Learning Outcome/Assessment Committee is a working group that has developed Institutional Learning Outcomes as well as a train-the-trainer approach to learning and using Improve (formerly TracDat) and SharePoint. The SLOAC committee facilitated the assessment of Course Level Student Learning Outcomes (SLOs), Program Level Program Learning Outcomes (PLOs), and Institutional Learning Outcomes (ILOs).

FUNCTION:

The chair reports to the Academic Senate during the Academic Senate monthly meetings on the first Thursday of the month during the fall and spring semester, when Academic Senate committees and subcommittees present their reports. The College realizes that assessment efforts require department/discipline leadership, and the SLOAC committee was formed to propose changes and offer suggestions to expand and improve assessment practices at the College. The duties of the committee include maintaining assessment-related documentation, coordinating the submission of assessment reports to the relevant dean. and updates, reporting to departments/disciplines on assessment issues and activities, and presentation, reporting and documenting assessment activities. The committee promotes a high level of proficiency in maintaining rubrics, SLO and Course Outline of Record consistency, and continuous assessment. The purpose of maintaining consistency and continuity is to improve student success and learning.

This committee holds meetings on a regular basis during the fall and spring semesters. For current meeting dates and times, please contact the Academic Senate Vice President.

CHARGE:

The Student Learning Outcomes Assessment Committee (SLOAC), as a committee of the Academic Senate, maintains the value of academic freedom and is charged with: developing campus policy related to Student Learning Outcomes (SLOs), Program Learning Outcomes (PLOs), and Institutional Learning Outcomes (ILOs); providing guidance and support to faculty and members of the campus community in the development of learning outcomes for courses, programs, and the institution; reviewing SLOs, PLOs and ILOs to ensure a uniform, high standard for assessment; and evaluating assessment policies to ensure relevant links to program review, College planning and budgeting, and compliance with accreditation standards and education policy and process.

PHILOSOPHY OF ASSESSMENT AT VICTOR VALLEY COLLEGE

HISTORY OF ASSESSMENT:

The mission of Victor Valley Community College is to:

- Cultivate intellectual growth, social responsibility, environmental stewardship, cultural enrichment, and economic development.
- Create exceptional and accessible lifelong learning opportunities that afford students within our expanding communities the attainment of knowledge and skills necessary for success in the global economy.
- Embrace difference in our communities by integrating their wealth of multicultural knowledge and wisdom into a cohesive and resourceful learning environment for all.
- Inspire innovative teaching and service with imaginative uses of collaboration and technology, fostering vibrant programs that are measurably effective in addressing student learning and community needs.
- Empower each student to learn by modeling academic integrity, democratic citizenship, and meaningful contribution to society.

The college expects students to demonstrate skills, solve problems and think critically about what they have learned. The College's faculty, staff, and administrators recognize that measuring student learning is more than identifying patterns in course completion rates and GPAs; the College is committed to thinking critically about how students learn and how each component of the college contributes to the learning process. Assessment procedures are based on the following points:

1. The College has always undertaken some form of evaluation of learning but has now formalized the evaluation process through assessment methods. Each area of the campus has a formal on-going self-reflective cycle of evaluation that is tied to program review and program planning to determine how a discipline, department or program contributes to improvement of student learning.
2. Beyond measuring effectiveness, the assessment processes feature dialogue as a major component of the evaluation cycle, a discussion of results among members of discipline, department and program. In addition, the development of assessment processes is

guided by the following principles: faculty participate in writing, assessing, evaluating and planning; the faculty create assessment methods and evaluate processes for courses, and programs; assessment can be quantitative and/or qualitative; substantive dialogue exists among faculty of the College to improve teaching and learning and student success.

THE NATURE OF ASSESSMENT:

Learning Assessment is the process by which educators determine whether and how well the intended learning outcomes for an activity, a unit, a class, or a program have been achieved. The complete assessment process includes the collection and evaluation of information about student learning, dialogue among discipline faculty, planning for improvement for the discipline or program. Through these steps, an assessment loop is completed, and the cycle continues with the implementation of these plans, and reassessment to determine whether and to what degree improvement occurred.

THE PURPOSE OF ASSESSMENT:

Linda Suskie (2009, 58) explains that, "...[a]ssessment can help improve the quality of teaching, learning, programs, and planning and decision making." Moreover, assessment provides for transparency and accountability by providing evidence for institutional effectiveness to the stakeholders (*ibid.*). Accordingly, information collected through appropriate assessment methods is used to plan, maintain, and implement changes in curriculum, course and program design, and instructional practice for the purpose of achieving and improving student learning.

THE VALUE OF ASSESSMENT:

The systematic and effective practice of assessment on the course, program, and institutional levels is a primary standard of quality for educational institutions, a critical requirement for maintaining institutional accreditation, and a mechanism to demonstrate public accountability and accountability to Victor Valley College students.

RESPONSIBILITY FOR ASSESSMENT:

Institutional policies, procedures, and practices regarding learning outcomes assessment are academic and professional matters for which the Board of Trustees relies on the advice and judgment of the Academic Senate. Instructors within each discipline have the authority and responsibility to design, direct, and participate in all components of assessment. The district is responsible for providing sufficient training, research assistance, and technical support for faculty to effectively engage in and document the practice of learning outcomes assessment. Students are responsible for achieving the learning that is measured through the procedures and practice of assessment.

LIMITATIONS OF ASSESSMENT:

Disciplines may not use assessment to restrict the academic freedom of individual instructors to exercise professional judgment in selecting course materials, methods of evaluation and instruction, assignments and other learning activities. The district may not use assessment data to justify program discontinuation or merger or to support decisions regarding faculty compensation, tenure, advancement, assignment, discipline or termination.

METHODS OF ASSESSMENT:

Faculty are best qualified to identify and implement the methods of and procedures for

assessment that are most effective within their own disciplines. Victor Valley College faculty agree, however, that assessment is most valuable when it is authentic¹, direct, multidimensional, ongoing, course-embedded, formative and summative, aligned with institutional and program purposes, and used as the basis for institution-wide improvement.

INSTRUCTIONAL ASSESSMENT PROCESSES

THE SLO ASSESSMENT PROCESS:

Student Learning Outcome Assessments are developed and evaluated in a collaborative effort by instructors teaching a specific course. The instructors are discipline experts in terms of information on the needs of the students, instruction, skill development, and practical application of concepts learned. The course SLOs are vetted and established departmentally; a current list of all course SLOs is maintained in CurricUNET.

See pp. 8-14 in this handbook for information on the process of writing an SLO. The SLOs are assessed and a narrative is written according to a cycle established by the department. The results of the assessment are housed in Improve, and the data is analyzed in program reviews and departmental meetings.

THE PLO ASSESSMENT PROCESS:

The purpose of program-level assessment is threefold: (1) to provide evidence of exemplary programs, (2) to identify courses that need improvement, and (3) to identify student improvement. The Academic Senate defines a program in the following manner:

For the purpose of program learning assessment practice and reporting, an “instructional program” is a defined sequence or grouping of courses within a discipline required for the completion of a major, degree, or Chancellor-approved certificate at Victor Valley College.

PLOs are written by the Program, see pp. 13-16 in this handbook for information on the process of writing a PLO. The PLOs are assessed and a narrative is written according to a cycle established by the program. The results of the assessment are housed in Improve, and the data is analyzed in program reviews and departmental meetings.

THE ILO ASSESSMENT PROCESS:

During the spring 2013 semester, the College piloted the Institutional Learning Outcomes (ILO) project. In spring 2017 semester the College re-assessed the ILOs using the same testing instrument from the pilot project. An effective method to meet state requirements was developed, and the participation of the disciplines were very helpful to the College in completing the ILO project.

¹ Suskie (2009) defines authentic assessment as “Performance assessments that ask students to do real-life tasks, such as analyzing case studies with bona-fide data, conducting realistic laboratory experiments or completing internships.”

The SLOAC committee agreed on the following parameters for the ILO assessment:

The ILO assessment will consist of an online test. We are using the same proficiency profile in both years that focuses on and measures all five Senate-adopted ILOs. By using the same testing instrument, the College now has a quantitative and qualitative means of comparison. Furthermore, the test has a common rubric that furnishes the same measurement.

Victor Valley College's ILOs are:

1. Communication: Read and write analytically including evaluation, synthesis, and research; deliver focused and coherent presentations.
2. Computation: Apply complex problem-solving skills using technology, computer proficiency, decision analysis (synthesis and evaluation), applications of mathematical concepts and reasoning, and the analysis and use of numerical data.
3. Information Competency: Students demonstrate information competency and critical thinking skills through their ability to effectively locate, retrieve, evaluate and utilize use library and information resources within the guidelines of academic standards to meet collegiate and personal information needs.
4. Creative, Critical and Analytical Thinking: Apply procedures for sound reasoning in the exercise of judgment and decision making; demonstrate intellectual curiosity and a respect for learning; solve problems through analysis, synthesis, evaluation and creativity; identify, evaluate and appropriate use of multiple sources of information.
5. Social and Personal Responsibility: Evaluate the relationship between natural, social and economic systems and the significance of sustainability; demonstrate responsible attitudes toward cultural diversity, citizenship, personal contribution to local and international communities, and the effect of human actions on the environment.

The ILO assessment quantifies and qualifies success in Critical and Analytical Thinking. Students that achieve high scores on this assessment demonstrate skill in competencies required to be successful in four-year institutions. Moreover, high scores demonstrate non-academic skill competencies that produce the "whole student." As all five of the ILOs support the mission of the College, achievement demonstrates the success of the College in serving students.

GUIDANCE ON HOW TO CONDUCT ASSESSMENTS

HOW TO WRITE SLOS:

Student Learning Outcomes: 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. (*ACCJC Standards Glossary*) Student Learning Outcomes, Learning Objectives, and associated Methods of Assessment must be defined for each course and are required components of each Course Outline of Record.

Learning Outcomes (SLOs)	Learning Objectives
Outcomes are limited in number, comprehensive, and combine numerous discrete skills and concepts	Objectives are numerous, narrow in scope, and descriptive of discrete skills and concepts.
Outcomes are attained through synthesizing a sequence of learning experiences and activities and are measured by integrative assessments.	Objectives are attained and assessed through individual assignments and learning activities that are restricted in focus or scope.
Outcomes describe the highest levels of cognitive, psychomotor, and/or affective learning.	Objectives may be limited to the pre-critical levels of cognitive, psychomotor, and affective learning.

Learning Objectives state knowledge and skills that are required in order to achieve the identified Learning Outcomes (SLOs) for a course. SLOs are course-specific. Course Learning Objectives should be directly related in content to a specific Learning Outcome and should contribute to the attainment of that Learning Outcome.

CRITERIA FOR COURSE-LEVEL SLOs:

1. Limited in number (3-6 per course).
2. Incorporate action verbs appropriate to the discipline (see Taxonomy in the [Appendix](#)). Avoid the following: "understand," "learn," "know."
3. Call for critical thinking.
4. Refer to required topic areas or themes from the "course content."
5. Integrate essential concepts and skills.
6. Summarize all knowledge and skills intended to be achieved in the course.
7. Useful for creating assignments and/or activities by which intended learning is achieved.
8. Measurable by means of identified course-embedded methods of assessment.

Assessment: Methods that an institution employs to gather evidence and evaluate quality (ACCJC Standards Glossary). Student learning outcomes and their systematic assessment are mandatory components of all curricula, certificate and degree programs, and the general education program as described under Board Policy and Administrative Procedure 4025. As mandatory components, assessment methods must be embedded within the course—that is, aligned with course objectives and integrated with instructional strategies and learning activities (Victor Valley College AP 4000).

CRITERIA FOR SELECTING METHODS OF ASSESSMENT:

1. Direct observation of student performance is preferable.
2. Target complex tasks that authentically demonstrate attainment of the SLO being measured. See [The Case for Authentic Assessment](#).
3. Embed assessment in methods used to evaluate regular graded coursework.

4. Select methods that are sufficient to measure all intended learning.
5. Select methods that will produce detailed data for use in improvement planning.

METHODS OF ASSESSMENT:

The methods of assessment can be found both in CurricUNET and Improve. Examples include but are not limited to:

- Exams
- Tests
- Quizzes
- Research Projects
- Portfolios
- Papers
- Oral Presentations
- Projects
- Field Trips
- Simulations
- Class Participation
- Class Work
- Group Projects
- Lab Work
- Home Work
- Standard instrument measuring student subjective opinion
- Standardized Testing/Standardized instrument objectively measuring student knowledge
- Online discussion boards
- Student satisfaction with their educational experience
- Competency-based written and practical tests which demonstrate the students' ability to apply skills and concepts learned to minimum standards established by the instructor
- Labor Market Information
- Capstone Assignment Projects
- Internship/Field Replacement
- Observations
- Surveys
- Writing Assignments

EXAMPLES OF COURSE SLOs²

CHEMISTRY 100:

Upon completion of the course the student can:

1. Identify, define, solve, and discuss qualitative and quantitative chemical principles
2. Identify, discuss, and characterize common functional groups inorganic chemistry
3. Identify, define, and discuss qualitative principles related to biochemistry
4. Laboratory Component: Demonstrate proficiency in basic laboratory techniques

AUTOMOTIVE 77:

Upon completion of the course the student can:

1. Safely and responsibly perform automotive repairs while minimizing the negative impact on the environment.
2. Effectively perform service-writing and management operations while complying with local and state laws.

² The examples found in this section illustrate a recommended format for SLOs/Assessments/Objectives. These examples are not intended to reflect the approved curriculum of current Victor Valley College courses.

PHILOSOPHY 114:

Upon completion of the course students can:

1. Analyze the role of state and the relationship between the individual and the state.
2. Describe and critique the contributions of classic and contemporary political theorists.
3. Define central issues in the philosophical analysis of political life and political organizations and evaluate contrasting approaches to resolving these issues.
4. Apply the analytical concepts and normative theories of social and political philosophy to current controversies regarding the organization of politics in a society.

HOW TO WRITE A PLO:



Program Learning Outcomes (PLOs) are measurable statements that define the specific knowledge, skills, attitudes and habits of mind that we expect our students to master upon completion of our programs. Mapping of course outcomes to program and institutional level outcomes is essential.

WRITING PROGRAM OUTCOMES:

- State the program purpose or mission
- Consider other areas or programs that feed into or interact with your program
- Analyze community expectations for the program
- Survey program descriptors and accomplishments
- Review the components of the program and
- Determine participant expectations

DEFINING PROGRAMS FOR THE PURPOSE OF ASSESSMENT:

For the purposes of program learning assessment practice and reporting, an “instructional program” is a defined sequence or grouping of courses within a discipline required for the completion of a major, degree, or Chancellor-approved certificate at Victor Valley College.

WRITING A MISSION STATEMENT FOR A COMMUNITY COLLEGE PROGRAM:

It is important to begin the process by developing a program mission statement. A mission statement explains what the program goal or goals are in a sentence or two. It is a simple statement that encapsulates the direction or purpose of the program.

GETTING STARTED:

These statements are best written with faculty representatives. Students, staff, faculty, and deans should meet to create this statement. CTE programs rely on industry advisory groups to assist with defining certificates, degrees and programs.

STEP 1:

Brainstorm the activities of the program. List what the program does and how it does things. What makes the program unique? Why does this program exist? What are the defining characteristics of this program?

STEP 2:

Begin by writing who you are, what you do, for whom are you writing, and why.

STEP 3:

Take this statement and modify it by asking questions.

Does this represent us?

Is this really what we do? Is this all we do?

Does this include our unique features?

Does this include the aspects that make us successful?

Does everyone involved in the program understand the statement? Does the statement suggest a vision and mission for the future?

STEP 4:

Compare your statement to other mission statements online or other departments on your campus and modify again. Refine the statement so that it is clear and succinct.

WRITING PLOs:

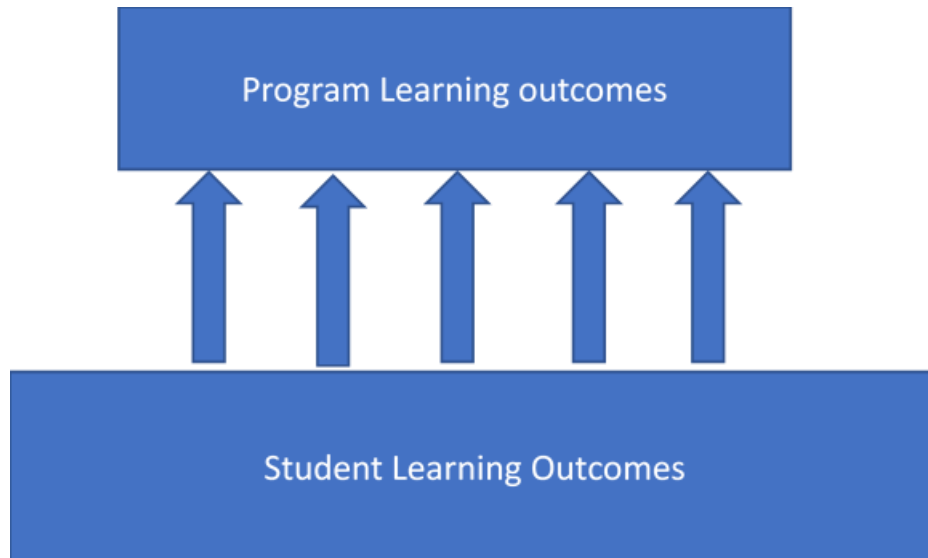
Articulating the program goals, and mapping the appropriate course SLOs, are important foundations in finalizing draft PLOs. It is also important to consider external requirements or expectations after a program or course of study. This would include an analysis of:

1. The community or employer expectations
2. Professional standards and expectations
3. Alignment between course, program, and institutional outcomes
4. Student expectations and needs, and transfer institution expectations

ASSESSING PLOs:

Victor Valley College Policy for assessing PLOs is twofold and is based on the type of program that is performing the assessment. Community colleges often do not have programs that end in a capstone course or project required to finish a degree or certificate; therefore, those programs that do not have a capstone course, or other unique assignment to assess their PLOs by the process of mapping the SLO to the PLO. Even though the SLO are more specific in

nature, as compared to the PLO, they are directly related to fulfilling the requirements of the PLO. Course SLOs are mapped to the program PLOs in Improve.



The other method for assessing PLOs is the use of a unique (or direct) assessment of the PLO using a project, portfolio or capstone course. Unique assessment of the PLOs is used by programs that have determined students fulfill the requirement of the PLOs by finishing a series of courses and have to demonstrate a skill set required to obtain a certificate or degree.

The goal is to explicitly state overarching outcomes that represent skills, knowledge, and abilities the students attain as a result of the program of study. This may include activities beyond course work (field trips, internships, volunteer experiences).

Depending on the assessment cycle established by the program, assessment narratives will be completed by the head or chair overseeing the program. Upon completion, the PLO assessment is submitted to the chair. The PLO assessment is housed in Improve (formerly TracDat).

HOW TO SUBMIT/REPORT AN SLO ASSESSMENT REPORT:

The assessment form is available on the CFIE webpage. [Student Learning Outcomes Form:](#)

Student Learning Outcome (SLO) Documents:


An **SLO Assessment Form** describing the process, essentially an assessment of the assessment, is also expected. Once assessment for SLOs is done, the instructor(s) evaluates the effectiveness of the SLOs and the assessment of them. From the information taken by the assessment, the instructor can revise the SLOs or can revise the assessment tools to better accurately measure student accomplishment in the future. When finished with assessment, the instructor writes an Assessment Report detailing the assessment of the students' accomplishments, evaluating the SLOs and assessments, and providing suggestions for improving effectiveness. The process is ongoing, continually reviewing assessment and the SLOs, all in the hopes of improving instruction and learning.

- **DOWNLOAD :** **SLO ASSESSMENT TEMPLATE (DOCX)**
 - How to save a documents that are labeled in a manner that one doesn't assume the discipline name, courses number, term nor content.
 - EXAMPLE #1: ALDH125-2014FA-ASSESSMENT-FORM.docx
 - EXAMPLE #2: ALDH125-2014FA-RUBRIC.docx
 - EXAMPLE #3: ALDH125-2014FA-SAMPLE.docx

Select a discipline in the drop down to **upload** your SLO Assessment documents (*requires login to SharePoint*).

Please make a selection below ▼

The SLO Assessment Form Template appears as follows:



VICTOR VALLEY COLLEGE
Student Learning Outcomes (SLOs) Assessment Form
Course Assessment

Division: _____ Program: _____

Course Number and Name: _____

Assessment Completed By: _____ Extension: _____

Reviewed By: _____ Term Assessed: _____

Related ILO	Related PLO	Course Intended Outcomes <small>(Per active COR in CurricUNET)</small> <small>All SLOs must be written verbatim from the COR.</small>	Next Assessment Date <small>(Per 4 year Calendar)</small>	Methods of Assessment and Criteria for Success <small>(criteria in a % format)</small>	Summary of Data Collected <small>(Data in % format)</small>	Analytical Narrative: <small>Did the assessment meet the criteria? What did you learn from the conducted assessment? What would you change?</small>
		SLO 1.				
		SLO 2.				
		SLO 3.				
		SLO 4.				
		SLO 5.				
		SLO 6.				
		SLO 7.				

Delete rows and add rows to the above table and add pages as needed.

1 Victor Valley College SLO Assessment Form
SLOAC Draft: 03/28/2018

The department chairs will be in contact with full-time faculty to relate which, if any, courses they must assess during the semester. This will depend upon the assessment schedule/calendar and faculty assignments. Part-time faculty are invited by the area dean to assess SLOs, if no full-time faculty is assigned to the same course. Part-time faculty are compensated according

to contract agreements.

Assigned faculty should review the SLOs and determine which assignments will be best suited for the purposes of assessment. The criteria for success and any rubrics should be utilized in the process of assessing student learning outcomes.

The SLO assessment form should be completed, including the criteria for success, the summary of data collected, and the use of results. The criteria of success will vary depending upon department or program standards. The summary of data will depend upon the determination of institutional, program, and department needs and may include information that will allow for the disaggregation of data according to various student populations. The use of results will include a discussion of recommendations by the instructors on how to improve student outcomes, recommended changes to SLOs, and recommended changes in method of assessment.

Once completed, instructors will submit SLO assessments to their area dean for review. The SLO assessment is housed in Improve (formerly TracDat).

The SLO Assessment Action Plan (Calendar) Template appears as follows:

<Insert Department Name>
SLO 6 Year Action Plan Calendar

ABBREVIATIONS: C=Collect Data (Assess); E/P=Evaluate & Plan next cycle; FA=Fall; WI=Winter; SP=Spring; SU=Summer

DEPT:																				Revision Date:		
Department	Course #	SLO #	2018SU	2018FA	2019SP	2019SU	2019FA	2020SP	2020SU	2020FA	2021SP	2021SU	2021FA	2022SP	2022SU	2022FA	2023SP	2023SU	2023FA	2024SP	2024SU	2024FA
EX:																						
DEPT Name	###	1	C		E/P			C		E/P			C		E/P			C		E/P		
DEPT Name	###	2	C		E/P			C		E/P			C		E/P			C		E/P		
DEPT Name	###	3	C		E/P			C		E/P			C		E/P			C		E/P		
DEPT Name	###	1	C		E/P		C															
DEPT Name	###	2		C		E/P																
Criteria: Every SLO should be assessed twice in three years and four times in 6 years, unless the course isn't offered twice within a 3 year cycle. Make the assessment pattern match the course offering pattern. Some disciplines assess all SLOs in the same term, where others assess SLOs over several terms.																						

ABBREVIATIONS: C=Collect Data (Assess); E/P=Evaluate Plan next cycle; FA=Fall; WI=Winter; SP=Spring; SU=Summer

Instructions & Template are available on the CFIE webpage: [SLO Assessment Action Plan \(Calendar\)](#)

SLO Assessment Action Plan (Calendar)

Assessment is expected to be done for SLOs on an ongoing basis and is meant to be recorded in some way for research and record keeping. Accreditation agencies may ask for verification of SLOs and assessment at any time. In any given semester, it is possible to assess SLOs one at a time or several at a time. As long as all SLOs are tested within a given time period. The SLO Assessment Action Plan identifies when a course SLO will be assessed twice within a three year cycle. All SLO Assessments Action Plan (Calendars) are updated by the department as courses are updated in CurricUNET.

- **DOWNLOAD :** [SLO Action Plan Template](#) (XLSX)
- **DOWNLOAD :** [SLO Action Plan Template INSTRUCTIONS](#) (DOCX)
- **UPLOAD :** [SLO Action Plans \(Calendars\)](#) - *login required*
- **View Historical Templates:** [SLO Action Plan Calendars](#) - *login required*

How to fill out the SLO Assessment Action Plan (Calendar):

SLO Assessment Action Plan (Calendar)

1

2

3

4

SLO ASSESSMENT (CALENDAR)

Department Chair		Department Chair																	
Department	Course	SLO	12FA	12WI	12SP	12SU	13FA	13WI	13SP	13SU	14FA	14WI	14SP	14SU	15FA	15WI	15SP	15SU	
EMS	60	1																	
EMS	60	2																	
EMS	60	3																	

5

This is a Hyperlink to SharePoint, Assessment Workspace where the 6 Year Action Plan (Calendars) are filed.

1. Type the departments name here.

2. In Column A put the name of the course.

3. In Column B put the course number to be assessed.

4. In Column C list the SLO number to be assessed.

If your Course Outline Record (COR) has three approved SLOs make sure each SLO has an assessment plan.

Student Learning Outcomes
Upon completion of the course the student can:

- Describe the proper assessment, treatment and management of medical and trauma patients.
 - Exams/Tests/Quizzes
 - Class Participation
- Describe the laws and regulations pertaining to the role of an EMT.
 - Exams/Tests/Quizzes
 - Class Participation
- Accurately perform a patient assessment of medical and trauma patients on simulated patients.
 - Simulation
 - Lab Activities
 - Competency based written and practical tests which demonstrate the students ability to apply skills and concepts learned to minimum standards established by the instructor.

6 YEAR

Department	Course	SLO
EMS	60	1
EMS	60	2
EMS	60	3

5. Fill in the Department Chair's name.

6. In columns D through K are your past historical completed assessment cycle. Column L- AA will host your Action Plan to assess(A), evaluated and a plan (E) for the coming cycle. For example:

- If SLO 1 is going to be assessed in the fall of 2014 put a "A" for that SLO in column D (F12).
 - A= Assess SLO
- For the semester that the data will be evaluated / plan put a "E".
 - E =Evaluate and Plan for the next SLO assessment
- If you have completes the assessment mark it with a "C".
- Assess two times within a three-year cycle or two times within six years.

C. Ex. #1

c

SLO ASSESSMENT (CALENDAR)

Department Chair		Department Chair																	
Department	Course	SLO	12FA	12WI	12SP	12SU	13FA	13WI	13SP	13SU	14FA	14WI	14SP	14SU	15FA	15WI	15SP	15SU	
EMS	60	1	C																
EMS	60	2	C																
EMS	60	3	C																

a

b

C. Ex. #2

SLO ASSESSMENT (CALENDAR)																		
SLO ACTION PLANS (CALENDARS) - SHAREPOINT																		
Department	EMS																Department Chair	
Department	Course	SLO	12FA	12WI	12SP	12SU	12FA	12WI	12SP	12SU	12FA	12WI	12SP	12SU	12FA	12WI	12SP	12SU
EMS	60	1	C				C				A				E		A	
EMS	60	2		C				C				A			E			A
EMS	60	3			C				C				A		E			A

C. Ex. #3

SLO ASSESSMENT (CALENDAR)																		
SLO ACTION PLANS (CALENDARS) - SHAREPOINT																		
Department	EMS																Department Chair	
Department	Course	SLO	12FA	12WI	12SP	12SU	12FA	12WI	12SP	12SU	12FA	12WI	12SP	12SU	12FA	12WI	12SP	12SU
EMS	60	1	C				C				A				E		A	
EMS	60	2		C				C				A			E			A
EMS	60	3			C				C				A		E			A

e. The plan below isn't the best way to document your plan. The requirement is assess all SLOs twice within three years.

SLO ASSESSMENT (CALENDAR)																		
SLO ACTION PLANS (CALENDARS) - SHAREPOINT																		
Department	EMS																Department Chair	
Department	Course	SLO	12FA	12WI	12SP	12SU	12FA	12WI	12SP	12SU	12FA	12WI	12SP	12SU	12FA	12WI	12SP	12SU
EMS	60	1	C				C				A/E	A/E	A/E	A/E	A/E	A/E	A/E	A/E
EMS	60	2		C	C	C		C			A/E	A/E	A/E	A/E	A/E	A/E	A/E	A/E
EMS	60	3			C			C	C		A/E	A/E	A/E	A/E	A/E	A/E	A/E	A/E

- Implement assessment cycles that the department can follow. By submitting this revised assessment to the SLO Coordinator the 6 Year Action Plan will be housed in a central place within SharePoint. [6 YEAR ACTION PLANS \(CALENDARS\) – SHAREPOINT](#) is a hyperlink into the folder that stores the forms for all faculty, staff and managers to have viewing access of the documents.
- Documenting changes and implementation of the SLOs and cycles is crucial. In the footer of the document you have a place to document the date of the minutes you as a department dialogued the forms current course SLO assessment cycles. The SLO Coordinator can document when they uploaded the document in SharePoint on behalf of the department.

DEPART. MTG. DATE: _____	A=ASSESS SLO E=EVALUATE AND PLAN C=COMPLETED AN ASSESSMENT	FA=FALL SEMESTER SP=SPRING SEMESTER SA=SUMMER SEMESTER W= WINTER SEMESTER
--------------------------	--	--

NOTE: The format of this template shouldn't be altered or changed.

For further assistance please contact your SLO Coordinator.
 HASS-David Gibbs at hassslos@vvc.edu
 HSPSIT-John Sweet at hspsslos@vvc.edu
 STEM- _____ at stemslos@vvc.edu

HOW TO SUBMIT/REPORT A PLO:
[The PLO Template is located on the CFIE website:](#)

Program Learning Outcomes

- **DOWNLOAD:** **PLO ASSESSMENT FORM** (Word Doc)
- **UPLOAD:** Completed **PLO ASSESSMENT FORM** (SharePoint Login Required)

The PLO Assessment form template appears as follows:

VICTOR VALLEY COLLEGE
 Program Learning Outcomes (PLO) Assessment Report
Program Assessment

Division: _____ Program: _____
 Name of Certificate: _____
 Name of Person Filling out Report: _____ Phone: _____
 Reviewed by: _____ Date: _____

Attach additional pages as necessary.

Related ILO	Program Learning Outcomes	Date of Next Assessment	Methods of Assessment	Criteria for Success	Data Results	Action Plan
1.						
2.						
3.						
4.						
5.						
6.						

1 | Victor Valley College
SLOAC Draft 3/28/2018

The PLO Assessment calendar template appears as follows:

Department:																													
Department	Course	PLO's	2017FA	2018WI	2018SP	2018SU	2018FA	2019WI	2019SP	2019SU	2019FA	2020WI	2020SP	2020SU	2020FA	2021WI	2021SP	2021SU	2021FA	2022WI	2022SP	2022SU	2022FA	2023WI	2023SP	2023SU	2023FA		

THE APPLICATION OF OUTCOMES ASSESSMENT TO INSTRUCTIONAL PROGRAM REVIEW AND INSTITUTIONAL PLANNING

Each Comprehensive Instructional Program Review and Annual Update requires an extensive report of the program's SLO and PLO assessment activities. Program faculty comment on how assessment methods provide meaningful feedback to instructors and describe examples of identified strengths and weaknesses, examples of implemented change based on assessment data, examples where loops of assessment have been closed, and examples where assessment data led to identification of required resources for programs. Assessment results and plans are used as a basis for program planning and budget augmentation requests. For more information, see [AP 6200](#).

DISAGGREGATION:

The purpose of disaggregation at Victor Valley College is to use meaningful SLO assessment data for the purpose of identifying groups and subgroups of students where there are gaps in performance. The disaggregated data will then be used for the planning and allocation of resources to close the gaps and increase student success across all groups. Standard demographics to be disaggregated are gender, age, and ethnicity. Additional demographics are to be determined by the process below.

DESCRIPTION OF THE SLO DISAGGREGATION PROCESS AT VICTOR VALLEY COLLEGE

1. A system is built in Improve to collect the data and aid in the disaggregation.
2. The SLOAC identifies demographic populations for disaggregation.
 - a. This will be done by including input from Student Equity and the Office of Instruction.
3. SLOAC determines programs and courses best suited for targeted demographic populations
 - a. This will be done by including the needs from Student Equity and the Office of Instruction.
 - b. The course to be disaggregated will use the following rubric:
 - 1) Is the course a high impact course utilized by a large number of students to attain their degree or certificate? _____
 - 2) Does that course have a higher than average number of students that do not pass or complete the course? _____
 - 3) Is it possible to replace the course with another if students have trouble in the particular course? _____
 - 4) Is the course required as a prerequisite for other courses? _____
4. The SLO Coordinator provides division deans and department chairpersons with the committee-approved plan

- a. The Department chairperson and the division dean determine sections to be disaggregated
 - b. The SLO Coordinator provides the list of sections for disaggregation to the Office of Institutional Research for development of entry forms in Improve
5. The SLO coordinator will notify the department when the form is available and faculty may enter the data.
6. Once the data is entered the Office of Institutional Research couples the outcomes data with demographic data from Colleague.
7. Demographic reports will be disseminated to the appropriate campus areas such as the department that did the assessment, Office of Instruction, Office of Student Equity.
8. Results are to be discussed with in the departments and college-wide and used for institutional planning and resource allocation processes
9. Action is to be taken on the results thereby increasing student success and “closing the loop.”

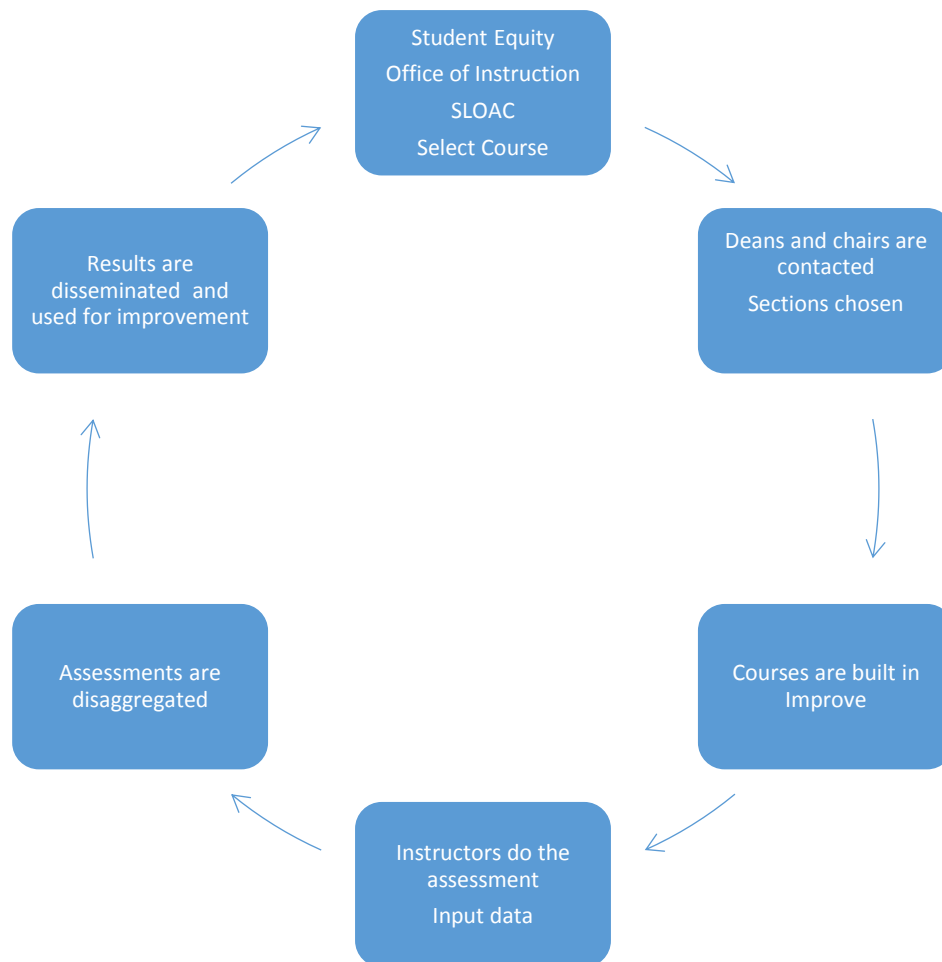
GUIDELINES FOR MEANINGFUL DATA FOR DISAGGREGATION:

When an English course is chosen they should all be using the same rubric that compromises the same areas of evaluation.

When a math course is chosen the assessment should be based on the problem sets. A grading scale should be used to assess the SLO so that the data can be effectively disaggregated.

- 1=F=59-0= Fail
- 2=D =69-60= Poor
- 3=C= 70-79 =Fair
- 4=B = 80-89 =Good
- 5=A = 90-100 =Excellent

FLOW CHART FOR DISAGGREGATION



ILO ACTION PLAN

1. Department Chairs, in collaboration with their faculty, will review the unique assessment and update mappings in Improve.
2. As SLOs or PLOs are changed, or as new courses are added, all associated mappings will be updated. The Assessment Coordinator will email the course originator to follow up on the status of any changes and the Coordinator will ensure that updated changes are synchronized with the active outcomes listed in Improve.
3. ILOs will be administered on the following schedule:
 - a. Outline for ILO Assessment
 - i. Instrument used in 2013 and 2017 studies: ETS Proficiency Profile
 - ii. Using the same ETS testing instrument, the same proficiency profile, affords the College a quantitative and qualitative means of comparison. The test has a common rubric furnishing the same measurement. The ETS testing instrument is an established measurement that has reliable examples that have been accumulated over time.

- iii. ILOs include: Communication, Computation, Information Literacy, Creative, Critical and Analytical Thinking, and Social and Personal Responsibility.
 - iv. ETS modules measure Critical Thinking, Written Communication and Quantitative Literacy.
 - v. 2017 ILO testing used Critical Thinking as the focus of study
 - vi. ILO testing should follow a three-year cycle, concurrent with SLO and PLO cycles
 - vii. Next ILO testing, following a three-year cycle, should occur in 2020
 - viii. 2020 ILO study should target Written Communication, the second ETS module
 - ix. 2023 ILO study should target Quantitative Literacy, the third ETS module
 - x. 2026 ILO study could target VVC's Social and Personal Responsibility ILO
4. After ILO assessment is administered, a report will be generated and sent back to each program (reverse mapping) for review.
 5. At the next full PRAISE cycle, each program /department will draft a narrative to close the loop at program levels.
 6. A summary of PRAISE responses/narratives will be generated by SLOAC to form the basis of future ILO reports.

FAQS FOR NEW FACULTY

Q1. HOW IS ASSESSMENT DIFFERENT FROM GRADES?

A1. As assessment expert, Linda Suskie notes, "There is a great deal of overlap between the tasks of grading and assessment, as both aim to identify what students have learned" (Suskie, 2009).

However, there are some significant differences between the two measures. Suskie (2009) highlights the following:

- a. Grades alone do not usually provide meaningful information on exactly what students have or have not learned.
- b. Grading and assessment criteria may (appropriately) differ.
- c. Grading standards may be vague or inconsistent.
- d. Grades do not reflect all learning experiences.

Graded assignments may be connected to a specified criterion for success, but grades often include elements that differ from the specified SLO. For example, a student may proficiently communicate an answer, but sentence structure and spelling may be unsatisfactory. Thus, the student may be included among the proficient, according to the outcome, though the grade may not directly reflect this. Another student may have submitted distinguished work, according to the expectations of the SLO, but due to the lateness of the assignment, and your policy, received a lower grade. Instructors should keep this in mind when they decide to use grades as the instrument by which the outcome is assessed.

Q2. AM I REQUIRED TO DO AN ASSESSMENT?

A2. If you are a full-time faculty member, you are required by your contract to complete

assessments, see Article 12 section A of the CTA contract. If you are a part-time faculty member, you are not contractually obligated to accept an SLO assessment assignment. The dean invites you to participate in the SLO assessment process, and you are compensated. Though you are not required to accept an assignment, see FAQ Q3 for reasons to participate.

Q3. WHY SHOULD I WANT TO ASSESS SLOS/PLOS?

A3. The reasons for assessment are both pragmatic and pedagogical in nature. Pragmatically, assessment is a vital part of program review by which allocations of funds are determined for your department or program. Moreover, assessment is an essential component of the accreditation process. Without the participation of faculty, both full and part-time, it is difficult to comply with ACCJC directives. Pedagogically, participating in assessment gives faculty a voice in constructing analytical narratives by which departments refine curricula. Also, assessments reveal strengths and weaknesses in course content, and assignments by which the outcomes are measured.

Linda Suskie (2009) highlights specific benefits to assessment:

- a. Assessment helps students learn more effectively
- b. Assessment activities bring faculty and staff together to discuss important issues
- c. Assessment activities help faculty and staff see how courses link together
- d. Assessment results provide feedback
- e. Assessment brings neglected issues to the forefront
- f. Assessment help faculty and staff make better decisions and use limited resources more widely

Q4. IS THERE A PARTICULAR ASSIGNMENT THAT I MUST USE FOR ASSESSMENT?

A4. The course outline of record, housed in CurricUNET suggests various assignments by which an SLO might be assessed. Whether a specific assignment has been selected to measure outcomes will depend upon the department or program. If you are not sure whether a specific assignment is required by your department or program, contact your chair.

Q5. IS THERE A RUBRIC OR SPECIFIED CRITERIA FOR SUCCESS THAT I MUST USE FOR ASSESSMENT?

A5. If you are not sure whether there is a rubric or specified criteria for success in assessing SLOs, contact your chair. The development of a department-wide rubric has certain advantages when comparing results among different faculty and during different cycles of assessment, but there is no requirement for a department to adopt a rubric.

For information about how to construct a rubric for assessment, see University of Colorado's [Creating a Rubric Online Tutorial](#).

Q6. WHAT KINDS OF COMMENTS SHOULD I PUT IN THE "ANALYTICAL NARRATIVE" SECTION OF THE TEMPLATE?

A6. Hopefully your assessment results provide you, the instructor, with useful feedback on your teaching methods and assignments with regards to student learning in your classes. Your assessment results are recorded in Improve at the end of each semester. These individual class assessment results are "pulled through" to the annual Program Reviews for summary discussion

and planning for program improvements. Examples of narratives might include adjustments to lectures and texts, adjustment to the SLOs, and adjustment to assignments.

Q7. IS THERE A DEADLINE FOR ASSESSMENT?

A7. Instructors assess student learning throughout a semester, but especially at the end of the semester. It is recommended as a best practice that instructors begin each semester by planning their assessment strategies. During the semester, instructors implement the assessments. Once the data has been collected, these assessment results are analyzed in the Program Review process. Consequently, effective program review depends upon faculty remaining current with assessments so that analysis of results can be accurate and up to date.

Q8. HOW OFTEN ARE SLOS/PLOS ASSESSED?

A8. Your department chair is tasked with maintaining a schedule of assessment. See your department chair to find out which SLOs/PLOs are being assessed and when (see [Department Chair Duties](#)).

Q9. WHICH SLOS DO I ASSESS?

A9. Which SLOs get assessed is specifically determined by the 6-year calendar, and the method is identified by the program faculty and is in CurricUNet.

Q10. WHAT DOES “CLOSE THE LOOP” MEAN?

A10. Closing the loop happens when you do a second round of assessment in order to see whether the improvement efforts you’ve employed after the first round have worked. It is a kind of “gold standard” for authentic assessment. The stages of this process are: 1) assess, 2) evaluate, and 3) plan. The process is then repeated continuously.

Q11. WHAT IS THE DIFFERENCE BETWEEN THE “MAPPING” OF SLOS TO PLOS AND THE “LINKING” OF SLOS TO PLOS?

A11. Course-level learning outcomes are often referred to as student learning outcomes (SLOs) which are measurable statements that define the specific knowledge, skills attitudes and habits of mind that we expect our students to master upon completion of our courses.

Program-level learning outcomes (PLOs) are measurable statements that define the specific knowledge, skills attitudes and habits of mind that we expect our students to master upon completion of our programs.

Institutional-level learning outcomes (ILOs) are measurable statements that define the specific knowledge, skills attitudes and habits of mind that we expect our students to master upon completion of their educational goal at our college.

It is mandated by ACCJC, the Accrediting Commission for Community and Junior Colleges, that institutions engage in assessment, evaluation and reflection. Additionally, ACCJC states that institutions must systematically and regularly evaluate how well and in what ways it is accomplishing its purposes, including assessment of student learning. Faculty are responsible for assessing their courses (SLOs) and programs (PLOs) (ILOs on the other hand are mapped to SLOs and PLOs in TracDat and are assessed through other means via the College). Faculty

may be asked to participate in assessing ILOs.

The linking of SLOs to PLOs is the specific process of using an SLO assessment as the means by which a PLO is assessed. An SLO that is mapped to a PLO is assessed, and the data collected from that assessment can also serve as the instrument by which the related PLO is assessed. Whether a PLO assessment can be assessed in this manner is determined by the department or program. PLOs may also require a unique assessment, and so linking is not appropriate.

Q12. WHERE CAN I FIND THE SLOS FOR MY COURSE?

A12. SLOs for academic courses and programs are found in the Course Outline of Record on COR's CurricUNET platform.

Q13. HOW DO I LET MY STUDENTS KNOW ABOUT THE SLOS RELATED TO THE COURSE?

A13. The primary mode by which you inform your students of SLOs is by listing them in your syllabus. Inform your students of which assignments are mapped to specific SLOs. You can embed common questions—mapped to SLOs—tests, quizzes, or class exercises; develop a common final exam; use portfolios or sample performance-based activities (essays, presentations, lab experiments, musical performances, etc.) and evaluate them against a common rubric. Minimally, you can focus on a particular student assignment and use a four-point scale to rate how well students demonstrate achievement of a particular SLO. See the course assessment guidelines and models for further help.

RESPONSIBILITIES OF DEPARTMENT CHAIRPERSONS

[Article 21.H.3.a.b.c.d.e](#) of the 2015-2018 CTA Contract outline the responsibilities of Department Chairs and Program Directors with respect to assessment. It states the following:

Curriculum and Course Offerings: Under the leadership of the department chair, disciplines within a department shall provide a balanced program of courses which meet the requirements of Victor Valley College students. Disciplines shall evaluate their offerings, courses of study, and shall make such changes to improve instruction as are within the limits of their authority.

The department chair or program director shall:

- a. Coordinate with discipline faculty to facilitate curriculum development, review, and revision in accordance with established college procedures and state guidelines.
- b. Present new or revised curriculum or programs as requested by area disciplines within his/her department to the Curriculum Committee or send an appropriate designee.
- c. The department chair shall coordinate with discipline faculty to facilitate SLO development and complete SLO assessments. This includes preparation of a SLO assessment calendar; distribution of SLO information, and SLO forms for uploading information into a central location to be determined by the District, and SLO rubrics and/or criteria for success.

When applicable, chairs shall also provide the same departmental leadership and information to discipline faculty regarding PLOs.

Chairs shall also incorporate SLO and PLO planning and evaluation into discussions at regular department meetings as described in Article 21 (H).2 and shall take appropriate actions to improve curricula and programs based on those discussions.

- d. The chair shall supply adjunct faculty with discipline SLO and, when applicable, PLO information and forms. However, adjunct faculty participation and SLO and PLO assessment assignments are at the discretion of the dean and in accordance with the adjunct agreement and/or MOU with the district.
- e. In multi-discipline departments (more than one TOP Code), the chair is only responsible for duties outlined in Article 21.H.3.c.d. in the discipline in which he/she has the majority of his/her teaching load.

APPENDIX

COMMON VERBS USED FOR ASSESSMENT

VERBS REQUIRING COGNITIVE OUTCOMES

<u>Knowledge</u>	<u>Comprehension</u>	<u>Application</u>	<u>Analysis</u>	<u>Synthesis</u>	<u>Evaluation</u>
CRITICAL THINKING					
Define	Translate	Interpret	distinguish	compose	judge
repeat	restate	apply	analyze	plan	appraise
record	discuss	employ	differentiate	propose	evaluate
list	describe	use	appraise	design	rate
name	recognize	demonstrate	calculate	formulate	compare
relate	explain	dramatize	experiment	arrange	value
underline	express	practice	test	assemble	revise
recall	identify	illustrate	compare	collect	score
inquire	locate	operate	contrast	construct	select
record	report	schedule	criticize	create	choose
recognize	review	shop	diagram	set up	assess
match	tell	sketch	inspect	organize	estimate
memorize	change	organize	debate	prepare	measure
select	rearrange	reconstruct	inventory	solve	consider
distinguish	give example	solve	question	produce	conclude
identify	illustrate	transfer	relate		weigh
label	comment	generalize	solve		criticize
	transform	choose	examine		assess
	demonstrate	classify	categorize		
	infer	calculate	discriminate		
	generalize		deduce		
	interpret		put into list		

<u>Knowledge</u>	<u>Comprehension</u>	<u>Application</u>	<u>Analysis</u>	<u>Synthesis</u>	<u>Evaluation</u>
	summarize		describe classify categorize		

- **Knowledge Recall:** To remember previously learned material.
- **Comprehension:** To grasp the meaning of the knowledge being learned and be able to paraphrase or explain it.
- **Application:** The ability to use learned information and materials.
- **Analysis:** The ability to break material down into its elements or parts so that its organizational structure may be understood.
- **Synthesis:** The ability to combine previous experience with new material to form a structure.

VERBS REQUIRING AFFECTIVE OUTCOMES

<u>Receiving</u>	<u>Responding</u>	<u>Valuing</u>	<u>Organizing</u>	<u>Characterization</u>
accept	Behave	balance	Codify	Internalize (Formal instruction does not address)
attend	complete	believe	discriminate	
develops	comply	defends	display	
realize	cooperate	devote	favor	
receive	enjoy	examine	judge	
recognize	examine	prefer	order	
	obey	pursue	organize	
	observe	seek	relate	
	respond	value	systematize	
	tolerate		weigh	

- **Receiving:** Awareness, willingness to receive, and controlled attention.
- **Responding:** Compliance in reacting to a suggestion, willingness to respond, and satisfaction in response.
- **Valuing:** Accepting a value as a belief, indication of preference for the value, and commitment.
- **Organizing:** Conceptualization of a value in abstract or symbolic terms and organization of a value system.
- **Characterization of an internally consistent value system:** The individual acts consistently in accordance with the values he/she has internalized.

VERBS REQUIRING PSYCHOMOTOR OUTCOMES

<u>Perception</u>	<u>Set</u>	<u>Guided response</u>	<u>Mechanism</u>	<u>Complex overt response</u>	<u>Adaptation</u>	<u>Origination</u>
Distinguish	physical-	copy	adjust	calibrate	adapt	construct
hear	adjust	demonstrate	build	coordinate	build	create
recognize	locate	determine	illustrate	maintain	change	design
relate	place	discover	indicate	operate	develop	produce
see	position	duplicate	manipulate	operate	supply	
sense	prepare	imitate	mix			
smell		inject	set up			
taste		repeat				
touch						

- **Perception:** Involves sensitivity to a situation object, or relationship that normally leads to action.
- **Preparation:** Involves readiness to perform.
- **Orientation:** Involves the discovery and/or decision of the response(s), which must be made.
- **Pattern:** Involves a learned response that is habitual; presentation is smooth and the presenter has confidence in his ability.
- **Performance:** Involves a complex motor action, carried out with a high degree of skill. (May be thought of as “motor synthesis”.)

REFERENCES

Suskie, L. (2009). *Assessing Student Learning: A Common Sense Guide, 2nd Ed.* San Francisco: John Wiley & Sons, Inc.