

The Skyline College SLOAC Framework: An Implementation Guide for the Student Learning Outcomes and Assessment Cycle

Version 3

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Developed by the Skyline College SLOAC Committee



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Steve Aurilio, Professor of Administration of Justice

Michael Bishow, Instructor of Communication Studies

Luciana Castro, Professor of Foreign Languages

Alice Erskine, Professor of Surgical Technology

Jan Fosberg, Professor of Kinesiology

Christopher Gibson, Assistant Professor of English

Richard Hough, Professor of Mathematics

Melissa Komadina, Counselor

Lucia Lachmayr, Professor of English

Jude Navari, Professor of Music

Sarah Perkins, Vice President of Instruction

Regina Pelayo, Professor of Cosmetology

Christine Roumbanis, Professor of Business Computer Systems and Management

Sarita Santos, Professor of Early Childhood Education

Arthur Takayama, Professor of Art

David Ulate, Interim Dean of Planning, Research, and Institutional Effectiveness

Dennis Wolbers, Librarian

Karen Wong, Professor of English



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Carlos Colombetti, Professor of Philosophy
Jan Fosberg, Professor of Physical Education
Jonathan Freedman, Professor of Mathematics
Christopher Gibson, Instructor of English
Valerie Goines, Professor of Early Childhood Education
Sherri Hancock, Former Dean of Enrollment Services
Cathy Hasson, Former Director of Planning, Research and Institutional Effectiveness
Raymond Hernandez, Dean of Science, Math, and Tech/ Former Professor of Respiratory Therapy
Richard Hough, Professor of Mathematics
Jennifer Hughes, Former Dean of Counseling
Betty Lindgren-Young, Former Professor of English
Jennifer Merrill, Professor of Psychology
Victoria Morrow, Former President
Jude Navari, Professor of Music
Vanson Nguyen, Instructor of Mathematics
Virginia Padron, Counselor
Regina Pelayo, Professor of Cosmetology
Christine Roumbanis, Professor of Business/ CAOT
Regina Stanback-Stroud, President/ Former Vice President of Instruction
Arthur Takayama, Professor of Art
Phyllis Taylor, Professor of Speech Communications
Ariel Vigo, Instructor of English
Linda Vogel, Former Professor of English
Dennis Wolbers, Librarian
Karen Wong, Professor of English
Soodi Zamani, Professor of Mathematics

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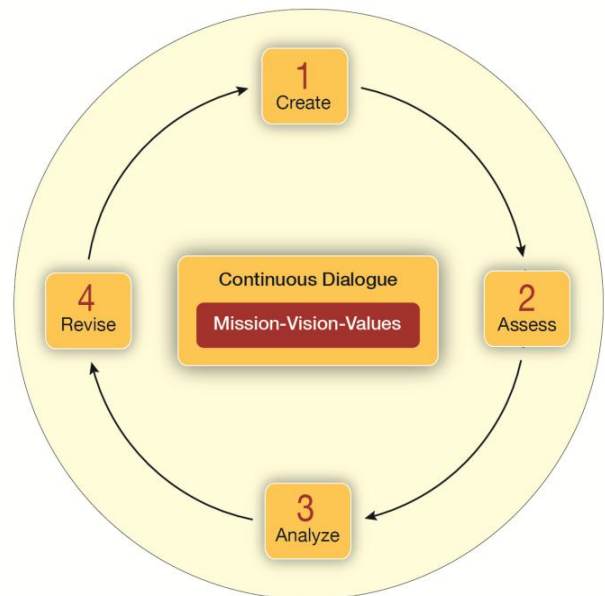
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S ECTION ONE: *COLLEGE IMPLEMENTATION MODEL*

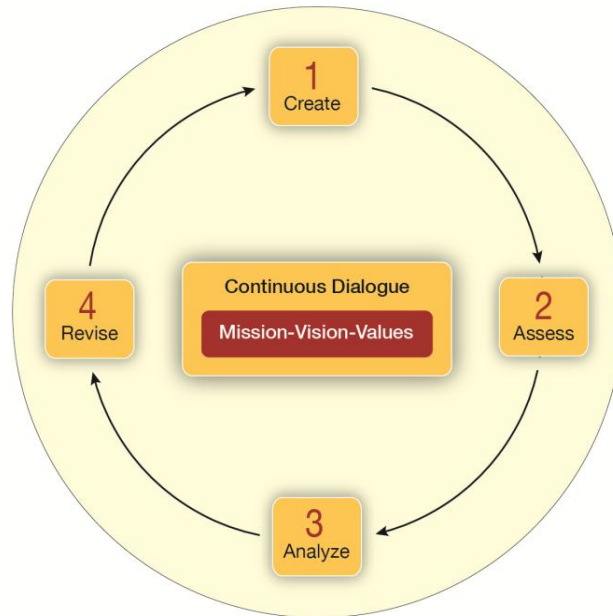
OVERVIEW

This section of the framework provides information on Skyline College’s approach to student learning outcomes and assessment. The mission of Skyline College is to empower and transform a global community of learners. In keeping with that mission, Skyline College’s continuous assessment of student learning outcomes informs key processes and allocation of resources. The Skyline College SLOAC process ensures that assessment at all levels—course, program, and institution-- is integrated through collaborative, college- wide planning, and supports the overall mission, vision, values, and goals of the college. The graphic depiction of the model demonstrates this cycle of continuous feedback. The process describes the flow and recommended starting points, and the philosophy provides the vision and direction for SLOAC at Skyline College.



SLOAC PROCESS

The Skyline College process for outcomes assessment revolves around continuous dialogue to ensure a systematic, ongoing cycle of authentic assessment. Such assessment is crucial to the continuous understanding and improvement of student learning.



Authentic assessment promotes continuous improvement by providing necessary evidence to guide effective decision-making at all levels: Classroom/Course level; Program level, including Student Support Services; and Institutional level. Assessment means “the systematic collection, analysis, interpretation, and use of information to understand and improve teaching and learning...Assessment is an ongoing process aimed at understanding and improving student learning” (Angelo 7).

The central questions we are continuously assessing are:

1. Upon completing a course/ program/ degree (including utilization of or participation in student services or special programs/services, e. g., EOPS program), what do we want students to learn?
2. How do we know they have learned it?
3. If the assessment results are less than satisfactory, what do we need to refine in order to help them to learn?

RECOMMENDED STARTING POINTS

For most faculty, the fundamental assessments are at the **course level**.

- Faculty and staff inform students about student learning outcomes (SLOs) via syllabi and/or the course outline of record.
- Faculty and staff assess, analyze, and revise SLOs at the classroom level.
- Faculty and staff then use classroom evaluation data to revise and refine instructional materials, pedagogy, curriculum, and/or assessment, as well as submit resource and staffing requests via the [annual program planning](#) OR the [comprehensive program review](#) self-study processes.

At the **program level**, the process of creating, assessing, analyzing, and revising student learning outcomes is the responsibility of instructional departments/divisions and student services.

- Faculty and staff inform students about program student learning outcomes (PSLOs) via the College Catalog and/or the College website.
- Individual faculty and staff, departments, divisions, and the vice presidents of instruction and student services revise instructional programs and student support services for continuous improvement of student learning. Generally instructional program level SLOs will be assessed through analyzing course level assessment results, but other assessment methods such as focus groups and surveys are options as well.
- The [annual program planning](#), [comprehensive program review](#) self-study, or [Administrative Leadership and Unit Review](#) processes inform resource prioritization and allocations and distribution of human resources.

At the **institutional level**, the process of creating, assessing, analyzing, and revising student learning outcomes is accomplished by college-wide, collaborative planning.

- Faculty and staff inform students about institutional student learning outcomes via the College Catalog and the Student Handbook.
- The Office of Planning, Research & Institutional Effectiveness and other college constituencies [assess ISLOs](#) and [publish the subsequent analysis of results](#) for discussion and action by relevant departments and services.
- Through [program review](#), departments consider how their respective disciplines or service areas contribute to students' fulfillment of the ISLOs, and how to improve students' fulfillment.

A MODEL FOR COLLEGE IMPLEMENTATION

The Student Learning Outcomes model represents the College's commitment to institutional effectiveness, whether at the course, student services, program or institutional level. The cycle of assessment is continuous. Each level itself begins with planning, continues through implementation and finally assessment. The assessment process is not complete until the results are analyzed and acted upon, if need be. The completion of one cycle will have an effect on the process and signal the launch of a subsequent cycle. It is this type of continuity among all stages of the cycle that helps to build on strengths or improve weaknesses through a reflection on the cycle as a whole.

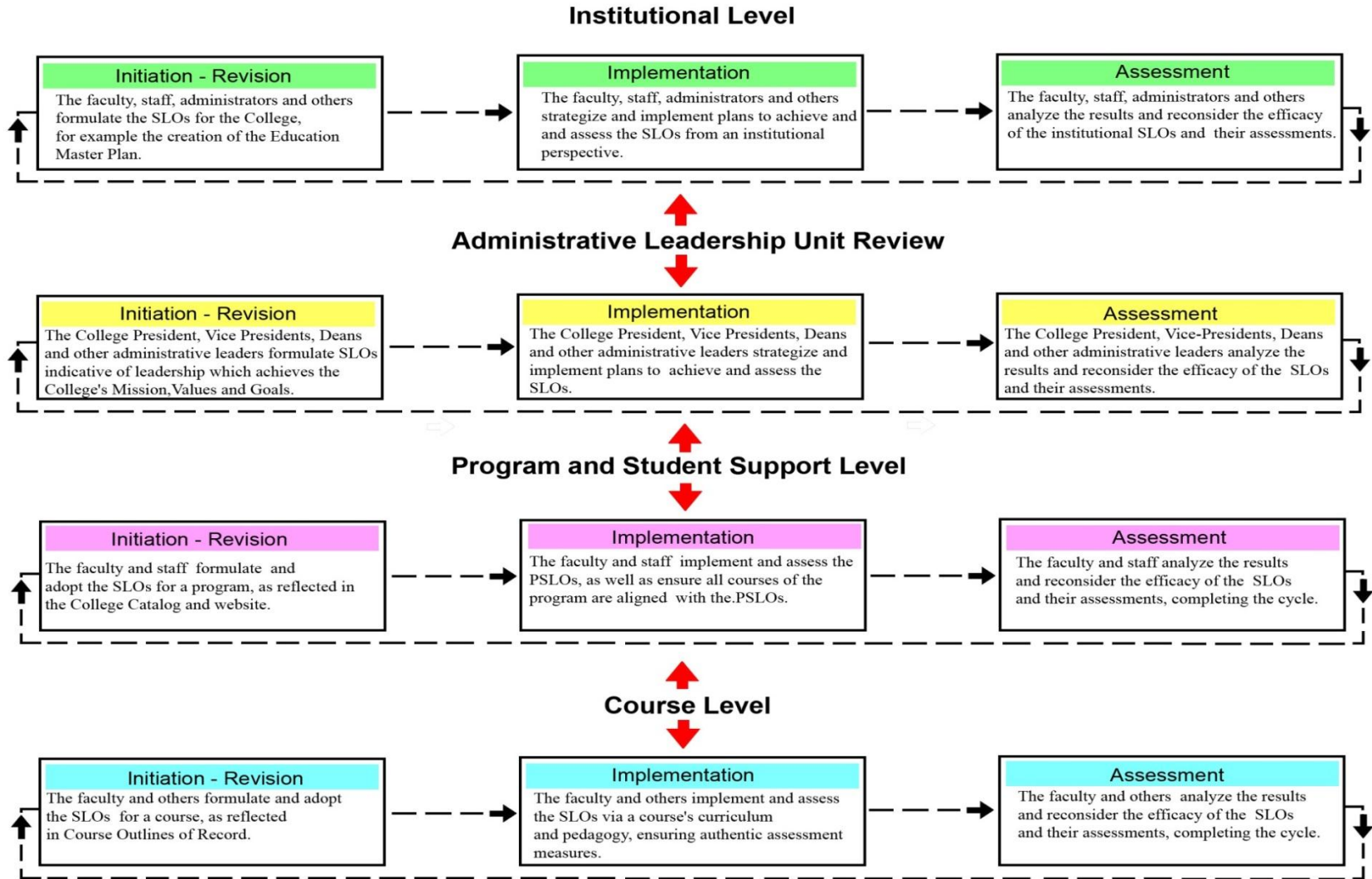
There has been much discussion as to the implications of assessments and faculty. It is therefore extremely important to note that a College SLOAC Philosophy was forged in 2005 (Appendix [A + B](#)) and several outstanding SLOAC resolutions were approved by the Academic Senate of Skyline College in 2012 ([Appendix C](#)):

1. The Academic Senate of Skyline College supports the primary role and responsibility of faculty in the development and assessment of course, program, and institutional student learning outcomes;
2. Further, the Academic Senate of Skyline College maintains that the processes established for assessment of course, program, and institutional student learning outcomes should be designed to empower faculty to improve their professional abilities as educators and to encourage meaningful collegial dialogue about improving student learning and program effectiveness.
3. The Academic Senate of Skyline College affirms its resistance to including the results from assessing student learning outcomes as an aspect of individual faculty evaluations, but rather should be used for course and program improvement;
4. The Academic Senate of Skyline College will work with the ACCJC and with other concerned statewide faculty organizations to ensure that accreditation recommendations do not use student learning outcomes in any manner that would undermine either local bargaining processes or the academic freedom of individual faculty members.

Hence, the fundamental premise of the entire SLOAC endeavor is to be a positive, pertinent, and constructive attribute of Skyline College's continual striving for excellence.

SKYLINE COLLEGE SLOAC IMPLEMENTATION MODEL

 Relationships
 Cycle paths



Following is a list that elaborates on the College's SLOAC Implementation Model: those responsible for each level of planning and outcomes assessment and the means through which planning is conducted.

Institutional Level

Initiation - Revision

Instructional Faculty

Library Faculty

Counseling Faculty

Student Services Staff

Administrative Leadership Unit

President's Cabinet

College Governance Council

Instructional Leadership Team

Student Services Leadership Team

College Success Initiative Coordinating Committee

Stewardship for Equity, Equal Employment and Diversity (SEEED) Advisory Committee

Institutional Student Learning Outcomes

Balanced Scorecard Strategies

Educational Master Plan

Strategic Plan

Planning/Budget Calendar Plan

Enrollment Management Plan

Human Resources Plan: Staffing for Student Success

SEEED/Student Equity Plan

Facilities Plan

Technology Plan

Sustainability Plan

Marketing Plan

Implementation

Instructional Faculty

Library Faculty

Counseling Faculty

Student Services Staff

Administrative Leadership Unit

President's Cabinet

College Governance Council

Instructional Leadership Team

Student Services Leadership Team

College Budget Committee

College Success Initiative Coordinating Committee

Curriculum Committee

FTEF Allocation Committee/Classified Staffing

Institutional Planning Committee

Professional Enrichment Development Advisory Committee (PEDAC) Committee

Stewardship for Equity, Equal Employment and Diversity (SEEED) Advisory Committee

SLOAC Steering Committee

Technology Advisory Committee

Assessment

Instructional Faculty
Library Faculty
Counseling Faculty
Student Services Staff
Administrative Leadership Unit
Office of Planning, Research & Institutional Effectiveness
Accreditation Oversight Steering Committee and Self-Study Teams
College Success Initiative Coordinating Committee
Curriculum Committee
Educational Policy Committee
Institutional Planning Committee
Stewardship for Equity, Equal Employment and Diversity (SEEED) Advisory Committee
SLOAC Steering Committee
Students

Administrative Leadership and Unit Review

Administrative Leadership Unit Level

Initiation - Revision

President
Vice-President of Instruction
Vice-President of Student Services
Dean of Admissions and Records
Dean of Counseling, Advising and Matriculation
Dean of Planning and Research

Dean of Business, Education, and Professional Programs Division
Dean of Kinesiology, Athletic & Dance Division
Dean of Language Arts Division
Dean of Science, Math & Technology Division
Dean of Social Science/Creative Arts Division

Coordinator of the Center for Student Life and Leadership Development
Coordinator of the Extended Opportunity Program & Services (EOPS/CARE/Calworks)
Director of Business Services
Director of Financial Aide
Director of the Learning Center
Director of Library Services
Director of Marketing, Communications & Public Relations
Director of Workforce Development Grants & Services
Director of SparkPoint at Skyline College
Executive Director of the Bay Area Center for International Trade Development

Administrative Leadership and Unit Review

Implementation

(Same as above)

Assessment

(Same as above)

Program and Student Support Service Level

Initiation - Revision

Instructional Faculty
Library Faculty
Counseling Faculty
Student Services Staff
General Education Committee
Honors Transfer Program Steering Committee

Program/ Service Area Student Learning Outcomes
Educational Policies

Annual Program Planning
Comprehensive Program Review

Implementation

Instructional Faculty
Library Faculty
Counseling Faculty
Student Services Staff
Chief Public Safety Officer
Coordinator of the Disability Resources Center
Coordinator of the Honors Transfer Program
Director of the Career Services Center
Director of the Learning Center
Director of the TRIO Program
Director of Health Services
College Governance Council
Instructional Leadership Team
Student Services Leadership Team
Institutional Planning Committee
College Budget Committee
SEED/Student Equity Committee
College Success Initiative Coordinating Committee
Curriculum Committee
General Education Committee
Technology Advisory Committee

Assessment

Instructional Faculty
Library Faculty
Counseling Faculty
Student Services Staff
Chief Public Safety Officer
Coordinator of the Disability Resources Center
Coordinator of the Honors Transfer Program and the HTP Steering Committee
Curriculum Committee
Director of the Career Services Center

Director of the Learning Center
Director of the TRIO Program
Director of Health Services
Office of Planning, Research & Institutional Effectiveness
SEED/Student Equity Committee
College Success Initiative Coordinating Committee
Career Technical Education and other Outside Advisory Committees
General Education Committee
Students

Course Level

Initiation - Revision

Instructional Faculty
Counseling Faculty
Student Services Staff

Course Student Learning Outcomes
Course Outline of Record/Syllabus

Annual Program Planning
Comprehensive Program Review

Implementation

Instructional Faculty
Counseling Faculty
Student Services Staff

Assessment

Instructional Faculty
Counseling Faculty
Student Services Staff
Curriculum Committee
Students

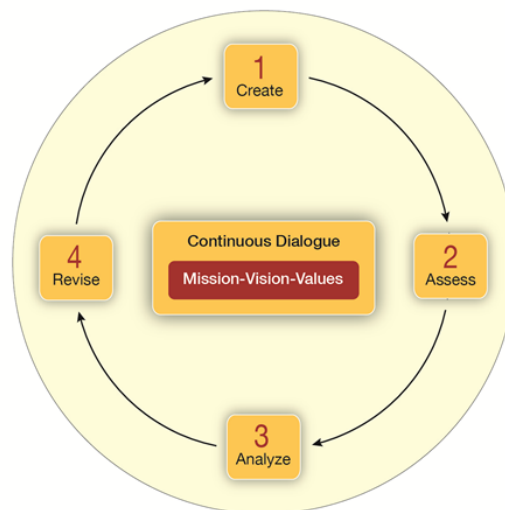
S ECTION TWO

Student Learning Outcomes

OVERVIEW

This section of the framework provides information on Skyline College’s approaches to creating student learning outcomes.

If you are working with existing SLOs or are comfortable with SLOs already created, the next step is to create an assessment plan for your SLOs. Information about assessment plans can be found in [Section Three](#).



We begin with

- (1) a definition of student learning outcomes and how they affect learning, as well as
- (2) the distinctions between objectives and outcomes.

We then offer two different “step by step” approaches to help you write student learning outcomes, including worksheets to facilitate this process and a checklist for you to use once they are written.

For those who generated course level outcomes, we provide strategies to strengthen overall coherence of curricular offerings. On the more immediate level is consideration of whether and how your assignments align with specific learning outcomes. On the more global level is consideration of whether and how course student learning outcomes align with those of the program and the institution.

Note. Many of the resources in this chapter were adapted from Bakersfield College’s and Cabrillo College’s assessment resources. We also built upon presentations by Dr. Mary Allen, a consultant in assessment and accreditation in higher education.

THE SLO ENVIRONMENT

Learning is a complex and reciprocal process that involves mutual expectations between students and faculty or staff. How well a student learns is as dependent upon how much he or she invests in the process as the conditions for learning created by courses, programs, and institutions. Faculty or staff expect students to come to learning contexts prepared and committed to learn. Students, in turn, expect faculty to create effective learning opportunities and environments. They expect us to hold them to appropriate standards and to help them attain these standards.

The College aims to improve instruction and learning at all levels, as well as to satisfy an important component of accreditation. To this end, we have developed and implemented a transparent, flexible, and sustainable process to assess learning. As one aspect of transparency, Student Learning Outcomes (SLOs) help to clarify the responsibilities of students, faculty and staff. Thus, faculty and staff should formulate SLOs at all levels: course, program, and institutional. Furthermore, the Accrediting Commission for Community and Junior Colleges (ACCJC), our accrediting body, requires that SLOs be included in course syllabi; deans are responsible for regularly reviewing course syllabi to ensure that they include SLOs. Explanations about when and how SLOs will be assessed as well as prompt feedback also enhance learning. SLOs that pertain to Student Services units, such as Counseling or Financial Aid, should be communicated through the College website and reinforced through pertinent processes or activities, such as creating a Student Education Plan or persisting on to their goals, whether that be successfully completing the semester or transferring. Thus, students should have a better sense of how to work with each other and with the instructor or staff to achieve these outcomes.

SLOs also are public, transparent, and communicated to the student. In the classroom they are part of the course outline of record and the syllabus, and students are reminded of the SLOs throughout the course. The instructor explains to the students when and how their learning will be assessed, and provides students with prompt and periodic feedback.

The College is committed to each instructor's pedagogical freedom --to use their own style, process, and material. Examples of these variations are using different textbooks, having different assignments, or utilizing different methodologies for teaching course material. However, the course content is consistent with the Course Outline of Record and promotes the same outcomes.

We adhere to the following resolutions pulled from the Skyline College Academic Senate's Spring 2012 resolutions:

1) WHEREAS, the development and assessment of student and program learning outcomes does not infringe upon Academic Freedom as defined by the *1940 Statement of Principles on Academic Freedom and Tenure with 1970 Interpretive Comments (AAUP Policy Tenth Edition, 2006)*;

FURTHER RESOLVED, That the Academic Senate of Skyline College will work with the ACCJC and with other concerned statewide faculty organizations to ensure that accreditation recommendations do not use student learning outcomes in any manner that would undermine either local bargaining processes or the academic freedom of individual faculty members.

WHAT ARE STUDENT LEARNING OUTCOMES?

An SLO contains three primary characteristics:

- **States what a learner will be able to do upon successful completion of a course, program, service, and/or degree or certificate;**
- **Is expressed using active verbs, and as such, incorporates any or all of the domains of learning (cognitive, psychomotor, or affective);**
- **Is assessable and measurable.**

An SLO is a clear statement of what a student will be able to do with what s/he has learned, upon successfully completing a course, program or service. It describes the assessable and measurable knowledge, skills, abilities or attitudes that students should attain by the end of a learning process. The learning process includes any set of college experiences (such as courses, degree programs, certificate programs, or utilization of or participation in student services or special programs/services).

An individual SLO is formulated using active verbs (such as “analyze,” “compare,” “demonstrate,” “compose,” and “embody”) that may derive from Bloom’s taxonomy of learning or may use discipline specific terminology. For example, a Spanish student may “translate” or “interpret,” a computer systems student may “download,” and a music theory student may “realize.” A set of SLOs for a particular course or program may incorporate any or all of the following three domains of

learning that were developed by Bloom to classify intellectual behavior and learning:

- cognitive (knowledge and understanding),
- psychomotor (physical skills and abilities), and
- affective (attitudes, behaviors, and values).

Refer to [Appendix D](#) for a fairly comprehensive list of active verbs for the three domains of learning.

Each SLO will be assessed by evaluating appropriate student performances or products (such as exams, essays, projects, portfolios, demonstrations, performances, art work, etc). The student performances or products being assessed should display evidence that learning has occurred at a specified level of competency and as a result of completing the course or program. Criteria and standards—such as rubrics—may to be established to evaluate the quality of student performances or products. Developing appropriate methods of assessment as well as clear evaluative criteria is as important as writing clear SLOs.

OBJECTIVES VS. SLOS

One way to understand the distinction between objectives and SLOs is to understand how they are related to each other.

Consider the following example from a Skyline developmental English course. What differences do you note?

Course Objectives:

Provide instruction in the following areas:

- Pre-writing activities;
- Organization: paragraph and essay unity;
- Thesis statements/ topic sentences;
- Introductions and conclusions;
- Revision, editing, and proofreading strategies;
- Sentence-combining;
- Various rhetorical modes with an emphasis on compare-contrast, classification, persuasion.

Course SLO:

Write focused, coherent, well-developed largely text based essays appropriate to the developmental level organized into effective paragraphs with major and minor supporting details, which support a clear thesis statement, and demonstrate competence in standard English grammar and usage.

A parallel example from Student Services is from the Health Center. What differences do you note?

Program Objectives:

- Promote personal responsibility and student self-advocacy;
- Raise awareness of services, medical insurance, etc.
- Increase awareness of community for themselves and others.

Program SLOs:

- Articulate (explain) their health care needs to receive appropriate assistance.
- Evaluates resources needed to improve physical/mental/ emotional health.
- Identify symptoms of substance abuse, eating disorder and/or other addictive/ behaviors and learn coping strategies;
- Demonstrate awareness of the global implications of diseases such as HIV, diabetes, etc.

The course **objectives** make explicit what the teacher will provide to enable students to fulfill the **outcome**, breaking down the process into manageable stages. The SLO requires students to employ higher level thinking that integrates the content and activities, mentioned or outlined in the objective.

When articulating student learning outcomes, think of the big picture. As such, SLOs:

- Are broad in scope and require **higher level** thinking;
- Require students to **synthesize** many discrete skills or areas of content;
- Ask students to **produce** something-- papers, projects, portfolios, demonstrations, performances, art work, exams, etc.-- that applies what they have learned;
- Require faculty to **evaluate** or **assess** the product to measure students' achievement or mastery of the outcomes.

On the other hand, objectives are on a more microscopic level, describing discrete skills, tools, and content. Think of objectives as the building blocks used to produce whatever is used to demonstrate mastery of an outcome. Objectives can be practiced and assessed individually, but are usually only a portion of an overall project or application.

In sum, consider the distinctions described in the following table:

Objectives/ Teacher	Outcome(s)/ Student
Objectives describe skills, tools, and/or content (nuts and bolts) that enable a student to fulfill the outcome(s).	Outcome(s) describe overarching product(s) that students will generate by applying the skills, tools, or content.
Objectives may require the use of less sophisticated tasks such as comprehension or replication.	Outcome(s) require the use of higher level thinking such as analysis, synthesis, and evaluation in order to demonstrate students' ability to apply the skills, tools, and/or content in authentic contexts for learning.
Objectives may be impossible to assess because they can often be numerous, specific, and detailed.	Outcome(s) are assessable; they result in product(s) that can be observed as a behavior, attitude, skill, or discrete usable knowledge <i>and</i> can be evaluated against criteria.

See [Appendix E](#) for an exercise on differentiating between objectives and SLOs.

As you talk to others about SLOs, keep in mind:

- Each course, classroom, and program has unique factors.
- Disciplines have unique language and culture.
- Cross-disciplinary conversations are invaluable.
- Ultimately discipline-specific conversations best define competencies for students.
- Everyone is a learner when it comes to assessment.
- As professionals, we are guided by the principles of academic freedom.

As you write your SLOs, keep the following in mind:

- **Try to limit your SLOs to no more than three** since eventually you'll have to assess all of them.
- **Make sure that the SLO is something that can be assessed or tested.** For example, be careful when describing attitudes in a learning outcome. They are hard to assess. Ask yourself if the attitude is crucial to success in your course or service. Are you satisfied if a student possesses the knowledge and skills being taught but doesn't have a certain attitude?
- **Use action verbs.** See [Appendix D](#) for the action verbs in Bloom's Taxonomy.
- **Write the SLO in language that a student will understand.** SLOs will ultimately be included on your syllabus and you will explain them to the students. To check for clarity, try explaining the SLO to a colleague who is NOT in your field. See if he/she understands it.

See [Appendix F](#) for the Student Learning Outcomes Checklist to evaluate the quality and appropriateness of your SLOs.

WRITING SLOs

Time to get started!

It's helpful to keep in mind that SLOs provide a focus for a course, no matter who is teaching the different sections, so generally discipline faculty should be in agreement what is core to a course. Secondly, SLOs will be assessed. As such, the SLOs should be readily observable in what students do, such as through their written work, exams, labs, presentations, and/or performances, or how they view themselves, for instance through a survey in which they reflect on their competencies or practices.

Two possible approaches to crafting your SLOs include:

1. **Major Assignments, Projects, or Tests** . List all of your major assignments for the course or service. Describe *what* the students are being asked to demonstrate in this assignment

Note that sometimes multiple assignments will have a common SLO. Depending on the number of outcomes, each sentence should describe each major knowledge, skill, ability or attitude that a

student will have gained by the end of your class. (Instructors, see [Appendix G](#); Student Services faculty and staff, see [Appendix I](#).)

2. **Objectives Approach.** Review the specific objectives of the existing course outline or service. Categorize them according to the larger purpose that they will serve and tie these objectives to something students will produce, making them measurable in a given context.

(Instructors, see [Appendix H](#); Student Services faculty and staff, see [Appendix J](#).)

ALIGNING ASSIGNMENTS AND ACTIVITIES WITH STUDENT LEARNING OUTCOMES

Faculty will need to evaluate not only whether assignments align with SLOs for a particular course, but also whether the course aligns with other courses in a sequence (“introduce, practice or demonstrate” in terms of program level outcomes) and, finally, whether the course coordinates with institutional outcomes.

GETTING STARTED

To align assignments and activities with SLOs, this section of the workbook will ask you to consider the following questions:

- What are the major assignments-- papers, projects, portfolios, demonstrations, performances, art work, exams, etc.-- that measure your outcomes?
- Which objectives-- skills, tools, and/or content-- help students to successfully complete your major assignments?
- If students are expected to demonstrate proficiency through an assignment yet have not been given adequate preparation, change the assignment accordingly.

As you complete these steps, remember that you are focusing on what students will *do*, not necessarily what must be covered. By using this approach, the organizing principle of your class is based on what students actually do and how they apply or demonstrate that knowledge, ultimately leading to mastery of the course outcomes.

Step One: Aligning Major Assignments and Activities with SLOs

Use the Major Assignments Worksheet ([Appendix K](#)) or a variation of the worksheet to plot which of the course SLOs the major assignments fulfill. List horizontally the course's SLOs; the general rule of thumb is that there should be no more than three SLOs. Then list vertically the major assignments that measure your outcome(s). Mark "X" if the assignment addresses the SLO.

Assignments that fulfill multiple SLOs work well for assessing since they decrease the amount of student work to collect and evaluate, thus making assessment more efficient. In addition, they tend to be effective comprehensive learning experiences for students.

Step Two: Questions to Consider After Aligning Major Assignments and Activities with SLOs

Examining whether your assignments align with your SLOs is good classroom practice. To do so, answer the following questions:

- Do my assignments provide students with an opportunity to demonstrate their mastery of the SLOs? Specifically, do any of the assignments fail to satisfy any of the SLOs? Cross out the assignments that need to be replaced with new assignments that will measure the SLOs.
- Or conversely, do the SLOs need to be revised to more accurately reflect the purpose(s) of the assignment(s)? Circle the SLOs that need to be further scrutinized.
- Do my assignments require that students demonstrate the kinds of knowledge, skills/abilities, and/or attitudes that I consider most central to the course?

Step Three: Aligning Related Objectives with Major Assignments

Narrowing your focus to the assignments that *do* align with your SLOs, identify the resources that each major assignment requires to be completed. As such, it is important to ask:

- What are the precise skills, tools and/or content (objectives) that students will need to learn in order to complete these assignments?

Use the following Activity Alignment Worksheet ([Appendix L](#)) or a variation of the worksheet to plot which of the course SLOs each of the major assignments fulfills as well as the accompanying classroom activities.

Step Four: Questions to Consider After Aligning Objectives with Major Assignments and Activities

Looking at the charts for each of your major assignments and activities, consider the following questions:

- Do my in-class activities, homework assignments, assigned reading and other exercises provide students the resources they need to successfully complete the assignment? Specifically, do I provide the necessary skills, tools, and/or content?
- Do my in-class activities, homework assignments, assigned reading and other exercises provide students adequate practice before the assignment is graded? If not, which need to be replaced or modified?

This concept of "practice" is one of the key principles to using SLOs as a means to strengthen your teaching. The emphasis is on what students can do with what they are learning rather than the knowledge itself. Exposing them to the course content without allowing them time to do something with it before they are evaluated on it will not lead to successful mastery of your course outcomes.

Students will need good exposure to the content of your course in order to apply it in an assignment. However, place application at the center of your planning rather than focusing on coverage. *Coverage is a valid concern, but if there's only time for covering content and not applying it, how do you know that learning is actually taking place?* Perhaps you need to rethink how you are using class time and how students are first exposed to the content so that there is ample opportunity for skill demonstration and application. Research shows that students are most likely to retain what they've learned if they apply it.

ALIGNING COURSES WITH PROGRAM SLOS

Aligning course SLOs with Program SLOs enables you to assess overall program coherence. Completing a matrix like the example below ensures that students have been introduced to the outcome, had formative feedback and opportunities for practice, and are finally assessed concerning successful student learning.

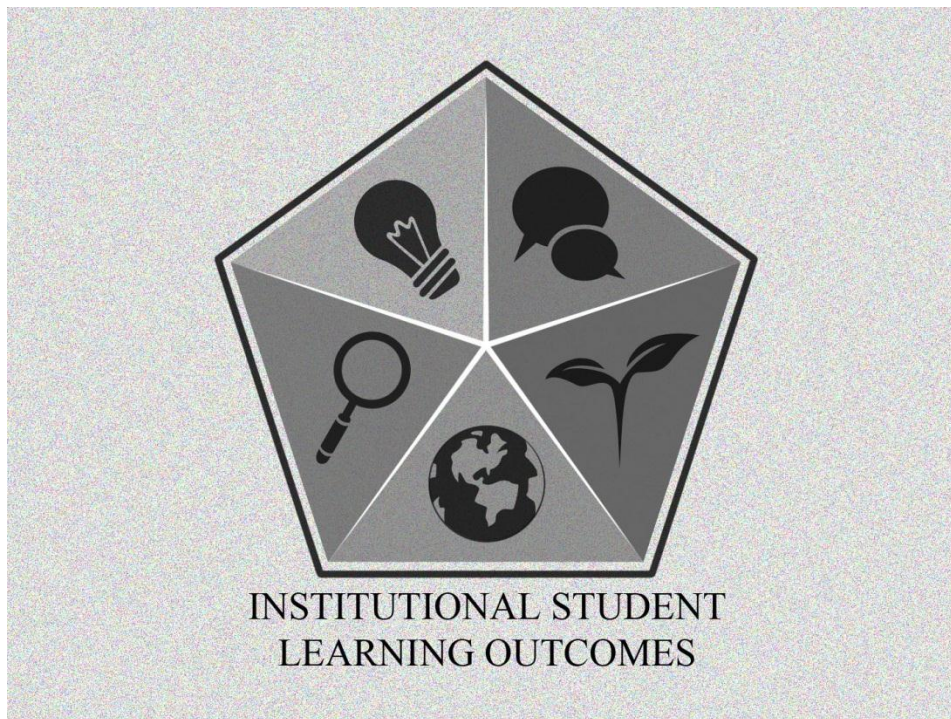
After writing the Program SLOs, conduct an analysis of where those SLOs are introduced (I), practiced (P), and demonstrated at the mastery level (D) by plotting them on the matrix. Consider the following questions afterward. For practice, apply the questions to the following example:

- Was each of the outcomes sufficiently introduced?
- Did students have enough opportunities to practice before being expected to demonstrate an SLO at the mastery level?
- Do the outcomes reflect the priorities of the instructors? If not, which outcomes either need to be more frequently addressed in the curriculum or perhaps deleted altogether?

	PROGRAM SLOs			
Course	PSLO 1	PSLO 2	PSLO 3	PSLO 4
100	I			
101		I		
102	P		P	
103				
200	P		P	
229				I
230			P	
280				
290	D		D	

See [Appendix M](#) for a template to align courses with PSLOs.

MAPPING COURSE SLOs TO INSTITUTIONAL SLOs



Graphic designed by Skyline College student Livius Darmawan

An institutional student learning outcome is a knowledge, skill, ability, and/or attitude that students should attain by the end of their college experience. Here at Skyline, students who complete an A.A./ A.S. degree and/or transfer preparation should have mastered the following institutional SLOs: critical thinking, effective communication, citizenship, information literacy, and lifelong wellness.

Mapping course-level SLOs with institutional SLOs enables you to identify which courses within your program may be contributing to student achievement of these outcomes, even if your discipline's approach differs from others'. As such, you may be asked to participate in the assessment of the ISLOs that your courses are mapped to. Conversely, mapping gives us the means to determine whether our institutional SLOs reflect our priorities as instructors.

To map your course SLOs to ISLOs, using TracDat is easiest. But the chart in the appendix is a starting point if you'd like to reference a print copy. Input the names of all of the courses in your

program at the top, and identify which SLOs from a given course are “central” to the course within the table. An SLO is “central” if it is essential to the course’s intent and therefore an instructional priority, and students demonstrate that SLO with an assignment, presentation, and/or performance, ideally one that you evaluate. Leave the space blank if the institutional SLO does not apply.

For programs that don’t have courses, such as student service areas, map your program outcomes to the institutional outcomes.

See [Appendix N](#) for the matrix.



Effective Communication



Critical Thinking



Lifelong Wellness



Citizenship

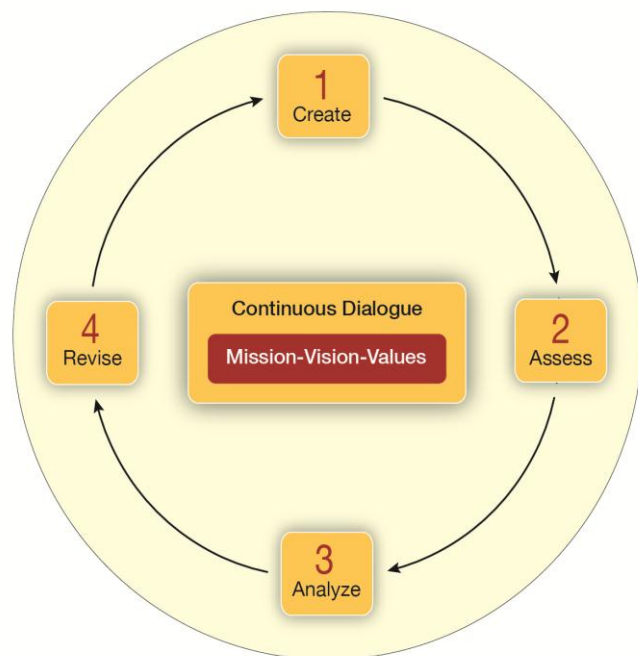


Information Literacy

SECTION THREE: **ASSESSMENT PLANNING & IMPLEMENTATION**

OVERVIEW

This section describes Skyline’s approach to student learning outcomes assessment at the course, program, student services, and institutional levels. You will learn about activities and assignments that measure student learning which can be applied at each of those levels. Special emphasis is given to developing a three-year assessment calendar, and using TracDat to create an assessment plan, record your results and action plans, and generate assessment reports.



WHAT IS ASSESSMENT?

By assessment we mean "the systematic collection, analysis, interpretation, and use of information to understand and improve teaching and learning.... Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance" (Angelo, p.7). To achieve these goals, assessment must be an ongoing, cyclical process requiring planning, execution, evaluation, and monitoring on a minimum of four levels: course, student services, program, and institutional. For a more extensive explanation of Skyline's guiding principles of assessment, see [Appendix O](#).

WHO WILL DO ASSESSMENT?

Skyline's faculty and staff, in consultation with the entire college community, will shape and design assessment activities and identify the core knowledge and skills that our students need to master. The faculty and staff will likewise develop benchmarks by which student progress can be evaluated. These will be ongoing processes, open to modification and improvement.

ACTIVITIES AND ASSIGNMENTS THAT MEASURE STUDENT LEARNING

Student learning can be measured directly or indirectly. Balanced assessment will include both direct and indirect measures.

- Direct measures are methods of collecting information about student learning that require students to directly display their knowledge, skills, and/or abilities. Direct measures usually employ a systematic scoring system, such as a rubric or checklist.
- Indirect measures are methods of collecting information about student learning that ask students to reflect on their learning rather than demonstrate it. Indirect measures often involve collecting opinions and perceptions from surveys and/or focus groups, as well as gathering pertinent statistics from department or college records.

On the following two pages you'll find a table that provides samples of direct and indirect methods of assessment often used at the course level. In the appendix to this section, you'll find two additional tables. The first table highlights the pros and cons of a variety of direct and indirect measures that can be

used at one or more levels ([Appendix P](#)). The second table provides a list of possible choices of direct and indirect measures of student learning at the course, program, student services, and institutional levels ([Appendix Q](#)). Although these tables suggest a wide variety of student activities and assignments, they are not exhaustive lists.

**SAMPLES OF DIRECT AND INDIRECT ASSESSMENT METHODS
AT THE COURSE LEVEL**

Direct or Indirect	Assessment Method Category (i.e. major assignment or activity) (NOTE: This is a data entry field on TracDat)	Assessment Method (i.e. scoring system applied to the major assignment or activity) (NOTE: This is a data entry field on TracDat)
D	Problem solving assignment or essay	5 Point Analytic Rubric
D	Homework Assignment	10 Item Checklist
D	Project or Term Paper	5 Point Analytic Rubric
D	Performance	3 Point Holistic Rubric
I	Self-Reflective Survey	25 Item Survey with 7 point Likert Scale
D/I	Group-work	Observation of dynamics and conversations using a 3 Point Holistic Rubric or 10 point Checklist
I	LC or lab hours attended	Total Number of Hours in a Semester
D	Portfolio	3 Point Holistic Rubric
D	Essay	15 Point Checklist

D	Quiz/Exam/Final	25 Item multiple choice, true/false, or fill-in
I	Class/Lecture/Activity Attendance	Total number or percentage of attendance in a semester
D or I	Outside-of-class activity	5 Point Checklist

ASSESSING AT THE COURSE LEVEL

1) CREATING A THREE-YEAR ASSESSMENT CALENDAR

All active courses should be assessed at regular intervals. Therefore, by the end of spring 2013, each instructional department should arrange all active courses on a three-year assessment cycle using the template in the appendix ([Appendix R](#)). In essence, 1/6 of all your courses should be assessed each semester. Your dean will work with you to identify courses that aren't offered every semester, as well as courses you may want to bank or delete. Your three-year calendar should be submitted to participating department faculty members, your Dean, and the Office of Instruction.

Please note that the template includes a schedule of ISLO assessment in the bottom row. If one of your courses maps up to a given ISLO, schedule its assessment the same semester as the ISLO assessment since you may be asked to participate in its assessment. Thus in one fell swoop, you'll be able to fulfill a course level and ISLO assessment.

2) USING TRACDAT TO DEVELOP A COURSEL LEVEL ASSESSMENT PLAN AND DOCUMENT RESULTS

Now that you have created a three-year assessment calendar and established SLOs for all active courses, you'll need to create an assessment plan for each course. An assessment plan is a document that lists your SLOs and identifies your assessment methods, scoring methods, and minimum acceptable performance for each SLO.

Your assessment plan is created by entering information in an online platform called TracDat. TracDat was purchased by the District in 2010 and serves as the central repository for all the assessment plans and assessment results of our three colleges. It is designed to facilitate and

manage all the phases of the assessment cycle. Each department has [a representative specially trained on TracDat](#) who can help you create your assessment plan. You'll also find a link to a TracDat user guide on the Skyline SLOAC website.

Shown below are the six core elements of a course level assessment plan that you'll be asked to complete on TracDat. Answering these core questions in advance will help you move through the process of creating an assessment plan:

1. **SLO Name**

* a short-hand title for the student learning outcome

2. **SLO**

* what the student is expected to do and/or know at the end of the course

3. **Assessment Method Category**

* the major assignment or activity that will be used for assessment (e.g. exam, essay, presentation, performance, survey, project, etc.)

4. **Assessment Method**

* a description of the assignment or activity as well as the scoring method that will be applied and used to gather data (e.g. a rubric, check list, Likert scale, etc.)-- Only a brief description fits directly in TracDat, but any details, or a copy of the assignment as the students would see it, may be loaded into the document repository. Uploaded documents will be available as hyperlinks on the assessment report.

If you are using an exam or survey, identify which questions apply to which SLOs. Similarly, if you are using a rubric, indicate which parts of the rubric apply to which SLOs.

EXAMPLE:

Final essay scored with analytic rubric, specifically in the areas of critical thinking and development.

5. **Success Criterion**

* the benchmark level of student achievement that is desired-- What are the performance standards that determine whether or not a student has achieved a given level of knowledge or skill proficiency. How do you know when a student

has achieved the knowledge, skill, or ability the SLO seeks to impart?

These questions can be addressed by writing a performance criteria statement that specifies a minimum score expected or accepted for the intended SLO. Note that this statement may specify proficiency levels for the individual student as well as for the assessment sample as a whole.

EXAMPLES:

Using a five point analytic rubric, at least 75% of students will earn a minimum of 20 points on the final essay.

Using a four point analytic rubric, the class will average 2.5 or greater in each category.

Using a four level analytic rubric, 75% of students will score at least “adequate” on the thesis, organization, development, and grammar parts of the rubric.

At least 70% of the class will correctly answer the three common multiple choice questions that are embedded in every section’s final exam.

6. **Schedule**

* which semester and year this course will be assessed

After you finish completing these core elements for each SLO in your course, you may want to run a report that compiles all this information into a single assessment plan. Your course assessment plan can be generated as a TracDat report which you can print out and/or store as a file under the “Documents” tab on TracDat. See [Appendix U](#) for examples of TracDat “four-column” assessment reports.

With your assessment plan written and stored on TracDat, you are now ready to apply your assessments in the classroom, gather the results, and record them on TracDat. Your department TracDat representative can help you record your results.

3) COMPLETING AN ASSESSMENT CYCLE

Drafting SLOs and assessing are only the beginning; the substance in assessing lies primarily in analyzing the data and crafting an action plan, should students fall below the benchmark established in the success criteria.

Thus, to complete the assessment cycle, first analyze the data with your colleagues, considering the following questions.

- In which areas did students excel?
- What issues and needs were revealed?
- How do the results compare to any baseline or benchmark data previously collected?
- What insights can you gain from the results?
- Did the assessment work, and if not, what needs to be revised?

See [Appendix S](#) for tips on configuring and analyzing assessment data.

Based on your analysis of the assessment results, craft an “action plan” with your colleagues: what changes to pedagogy or assessment are warranted, and/or what additional resources are needed to implement these changes and others. An effective action plan should:

- Address assessment results;
 - specific actions plans are connected to specific SLOs and assessment results
- Provide specifics so that it is clear what will take place;
 - a plan includes what, when, where, & how
- Inform the next cycle of assessment;
 - your next assessment might measure the effectiveness of your action plan to impact student learning

See [Appendix T](#) for action plan examples.

TracDat offers action plan options, though the list is hardly exhaustive. Among the possibilities are:

- 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 or prerequisites;
- Review course syllabus or outline.

Any proposed changes in assessment, pedagogy, or plans to request additional resources should be recorded on [TracDat](#) under “Action Plan,” and the [annual program planning document](#) or the comprehensive [program review](#).

The outcomes assessment model is based on continuous dialogue among faculty to ensure a systematic, ongoing cycle of assessment. The cycle is only complete after the results are documented, analyzed, and potential changes are discussed, recorded, and followed up. After a cycle has been completed on a course, the cycle begins again (starting with possibly adjusting the SLOs themselves). Assessments may be repeated to compare one year to another, or a completely different assessment method may be chosen.

4) USING TRACDAT TO GENERATE ASSESSMENT RESULTS REPORTS

TracDat has the ability to generate a variety of reports, including assessment results reports for a particular course, several courses, or an entire department. (Departments are called “Units” on TracDat.) These reports display SLOs along with a summary of assessments results and any proposed action plans. Having a summary view of assessment results is extremely useful for record keeping, comparing results over time, and facilitating discussion with your colleagues. Complete directions for running reports can be found on the College SLOAC TracDat website. See [Appendix U](#) for examples of TracDat “four-column” assessment reports.

ASSESSING AT THE PROGRAM/ STUDENT SERVICES LEVEL

All academic programs and student service areas at Skyline have established Program Student Learning Outcomes (PSLOs), which have been recorded on TracDat and published in the College Catalog and on the website. PSLOs are statements (typically four or fewer) that summarize the essential skills, knowledge and attitudes that a student gains after completing the program. With PSLOs now established, it is important for faculty to examine how their course level SLOs help students fulfill the PSLOs.

Assessing PSLOs is done by aligning and applying course level assessment data to the PSLOs. This process is known as “rolling up” course level assessment to program level assessment. For this “rolling up” to happen, faculty and staff need to have “mapped” (a.k.a. aligned) course level SLOs to PSLOs on TracDat. This mapping identifies which course level SLOs are central for students to achieve the PSLOs.

Faculty are able to generate reports on TracDat that show relevant course level assessment results rolling up to each of the PSLOs. These reports can be used to identify patterns and draw conclusions

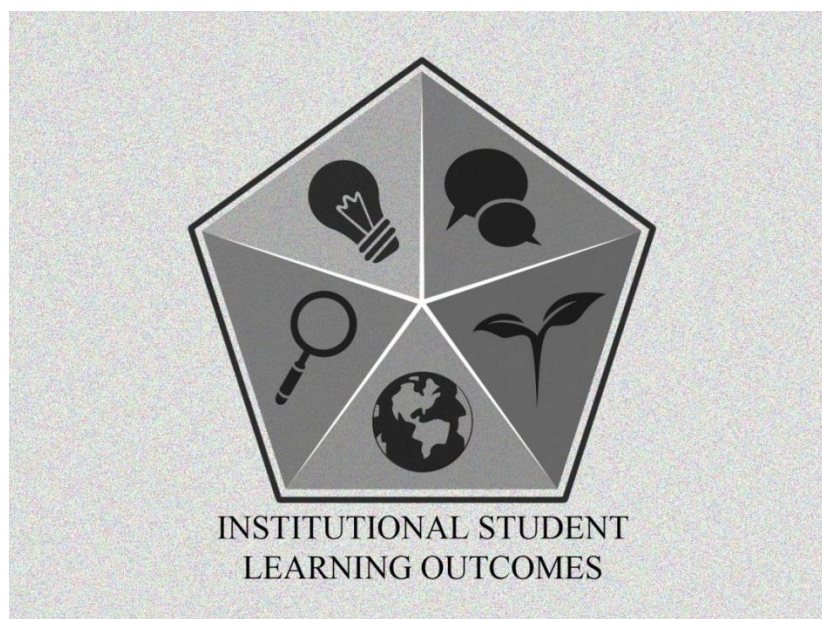
regarding the central question asked by program level assessment: How well are students achieving PSLOs and how does the program curriculum contribute to student success at the program level? After faculty analyze and discuss the report, important findings and insights are recorded on TracDat, thus completing the PSLO assessment cycle.

Programs also have the option of conducting other types of program level assessment in addition to the rolling up process. For example, some programs may wish to administer an exit survey or facilitate a focus group with graduates or certificate recipients; evaluate a culminating experience such as a capstone project, performance, or portfolio; tabulate the percentage of students who pass their boards/ industry certifications, etc.

Similarly, student services have established PSLOs, which have been recorded on TracDat and published on the website. PSLOs are statements (typically four or fewer) that summarize the essential skills, knowledge and attitudes that a student gains after utilizing the service. Faculty and staff can draw from existing data, surveys, focus groups, and student work to assess the PSLOs; they may opt to draw from a sample of student work since the student population is more amorphous than a given class. And to keep a historical reference of student progress, they also will record their insights in TracDat.

For more examples of program level assessment methods, consult [Appendix Q](#).

ASSESSING AT THE INSTITUTIONAL LEVEL



Skyline College shaped, adopted, and published in the College Catalog five ISLOs, which are derived from the AA/AS degree requirements: Effective Communication, Critical Thinking, Information Literacy, Citizenship, and Lifelong Wellness.

[The ISLOs are assessed with a direct and indirect measure.](#) The direct measure involves the use of a common rubric, which enables faculty to have a common language and criteria around assessment. Each of the ISLOs is scheduled to be assessed on a given semester, with one to two per academic year, until each of the five is assessed by faculty across the disciplines. Select faculty whose courses map up to the ISLO that is scheduled to be assessed that semester use the common rubric to evaluate students' work within their disciplinary framework. The data resulting from the assessment is then analyzed and discussed by the SLOAC Steering Committee and departments as they complete their program review. A campus-wide forum is also held on an annual basis to discuss ISLO assessment results.

The indirect measure is through the Community College Survey of Student Engagement (CCSSE). The CCSSE is a tool used to measure how students perform on standards relative to student engagement. The data resulting from this assessment is then analyzed and discussed by the SLOAC Steering Committee, and various participatory governance committees.

SLOs and Assessment Glossary

Analytic Scoring: It is evaluating student work across multiple dimensions of performance rather than from an overall impression (holistic scoring). In analytic scoring, individual scores for each dimension are scored and reported. For example, analytic scoring of a history essay might include scores of the following dimensions: use of prior knowledge, application of principles, use of original source material to support a point of view, and composition. An overall impression of quality may be included in analytic scoring.

Anchor: It is a sample of student work that exemplifies a specific level of performance. Raters use anchors to score student work, usually comparing student performance to the anchor. For example, if student work was being scored on a scale of 1-5, there would typically be anchors (previously scored student work), exemplifying each point on the scale.

Artifacts: They are a collection of papers, projects, documents, etc., which represent your knowledge, competency, understanding, and achievement of identified goals and learning incomes.

Assessment. Assessment refers to methods used by a faculty member, department, program or institution to generate and collect data for evaluation of processes, courses, and programs with the ultimate purpose of evaluating overall educational quality and improving student learning. Results of assessment may include both quantitative and qualitative data.

Authentic Assessment (also known as Performance Based Assessment). Authentic Assessment evaluates students' ability to use their knowledge and to perform tasks that approximate those found in real-life contexts or those that simulate a real-life context. Designed to allow students to actively demonstrate what they know rather than recognize or recall answers to questions, for example for a written test.

Benchmark: It is a detailed description of a specific level of student performance expected of students at particular stages or development levels. Benchmarks are often represented by samples of student work. A set of benchmarks can be used as "checkpoints" to monitor progress toward meeting performance goals within and across levels.

Classroom Assessment Techniques: CATs are "simple tools for collecting data on student learning in order to improve it" (*Classroom Assessment Techniques*, Angelo & Cross, 1993, p. 26). CATs are short, flexible, classroom techniques that provide rapid, informative feedback to improve classroom dynamics by monitoring learning, from the student's perspective throughout the semester. They're well suited for formative assessment purposes.

Classroom-Based Assessment: Classroom-based assessment is the formative and summative evaluation of student learning within a single course. This assessment involves evaluating the curriculum as designed, taught, and learned. It entails the collection of data aimed at measuring successful learning in the individual course and improving instruction with a goal to improving learning.

Closing the Loop: It involves using assessment results to improve student learning through collegial dialogue informed by the results of the learning outcome assessment. It is part of the continuous cycle of collecting assessment results, evaluating them, using the evaluations to identify actions that will improve student learning, implementing those actions, and then cycling back to collecting assessment results, etc.

Cohort: It is a group (of students).

Competence: It is a combination of skills, ability and knowledge needed to perform a specific task at a specified criterion.

Criteria: They are guidelines, rules, characteristics, or dimensions that are used to judge the quality of student performance. Criteria indicate what we value in student responses, products or performances. They may be holistic, analytic, general, or specific. Rubrics are based on criteria and define what the criteria mean and how they are used.

Criterion-Based Assessments: Instructors evaluate or score such assessment using a set of criteria to appraise work. Criterion-referenced evaluation is based on proficiency, not to the performance of other students or subjective measures such as improvement.

Culture of Evidence: The term culture of evidence refers to an institutional culture that supports and integrates research, data analysis, evaluation, and planned change as a result of assessment to inform decision-making (Pacheco, 1999). This culture is marked by the generation and valuing of quantitative and qualitative data providing accountability for institutionally defined outcomes (Wright, 1999).

Direct Measures: They are methods of collecting information about student learning that require students to display their knowledge, skills, and/or abilities. Examples are written assignments, classroom assignments, presentations, test results, projects, recitals, logs, portfolios, and direct observations (Leskes, 2002). Direct measures often require a systematic scoring system that employs a rubric.

Embedded Assessment: Embedded assessment occurs within the regular class or curricular activity, which encourages students to be motivated and perform to the best of their abilities. Often used for assessment purposes and classroom assignments that are evaluated to assign students a grade. Individual questions on exams can be embedded in numerous classes to provide departmental, program, or institutional assessment information. An additional benefit to embedded assessment is immediate feedback on the pedagogy and student needs.

Evidence: They are artifacts or objects produced that demonstrate and support conclusions, including data, portfolios showing growth, products, as opposed to intuition, belief, or anecdotes. “Good evidence, then, is obviously related to the questions the college has investigated and it can be replicated, making it reliable. Good evidence is representative of what is, not just an isolated case, and it is information upon which an institution can take action to improve. It is, in short, relevant, verifiable, representative, and actionable” (ACCJC, 2008, p. 10).

Evidence of Program and Institutional Performance: It is quantitative or qualitative, direct or indirect data that provides information concerning the extent to which an institution meets the goals it has established and publicized to its stakeholders.

Equity: It is the extent to which an institution or program achieves a comparable level of outcomes, direct and indirect, for various groups of enrolled students; the concern for fairness, i.e., that assessments are free from bias or favoritism. An assessment that is fair enables all students to show what they know or can do.

Focus Groups: They consist of participants who might contribute useful information related to student learning, either through surveys or interviews. Examples of possible focus groups include: 1) current students; 2) graduating students; 3) alumni; 4) current and perspective employers; 5) supervisors of students in field experiences. (Suskie)

Formative Assessment: Formative assessment generates useful feedback for development and improvement. The purpose is to provide an opportunity to perform and receive guidance (such as in-class assignments, quizzes, discussion, lab activities, etc.) that will improve or shape a final performance. See Summative Assessment, its opposite.

General Education: It is the content, skills and learning outcomes expected of students who achieve a college degree regardless of program or major. This includes both skills in such areas as effective communication, critical thinking, citizenship, information literacy, and lifelong wellness as well as content knowledge in a spectrum of learning outcomes including the arts, humanities, mathematics, sciences and social sciences.

Holistic Scoring: It is a scoring process in which a score is based on an overall assessment of a finished product that is compared to an agreed-upon standard for that task.

Homegrown or Local Assessment: This type of assessment is developed and validated for a specific purpose, course, or function and is usually criterion-referenced to promote validity, e.g. a department placement or exit exam. See Standardized Assessment, its opposite.

Indirect Assessment: They are methods of collecting information about student learning that asks students (or others) to reflect on their learning rather than demonstrate it. Indirect measures often involve collecting opinions and perceptions from surveys, interviews, focus groups, and/or reflective essays, as well as gathering pertinent statistics from department or college records.

Institutional Assessment: It is the on-going process of systematically measuring achievement of the Enduring Goals established by the College. Results are utilized in the annual planning and resource allocation cycle to improve institutional effectiveness. (IAPC)

Institutional Learning Outcomes/ General Education Outcomes/ Core Competencies.: These are the knowledge, skills, and abilities a student should attain by the end of a course, program or set of services. Because GE Outcomes represent a common core of outcomes for students receiving degrees, some but not all, institutions equate them with ISLO's. As such, upon graduation with an Associate's Degree, a Skyline student will acquire a level of proficiency comparable with the first two years of a baccalaureate degree in the following five General Education areas: effective communication, critical thinking, information literacy, citizenship, and lifelong wellness.

Institutional Effectiveness: It is a term used by various components of the institution or the institution itself to review how effectively goals are achieved.

Likert Scale: The Likert scale assigns a numerical value to responses in order to quantify subjective data. The responses are usually along a continuum such as responses of strongly disagree, disagree, neutral, agree, or strongly agree and are assigned values such as 1-5.

Longitudinal Cohort Analysis: It is a form of evaluation or assessment where a particular group (cohort) is defined on a set of predetermined criteria and followed over time (longitudinal) on one or more variables.

Metacognition: Metacognition is the act of thinking about one's own thinking and regulating one's own learning. It involves critical analysis of how decisions are made and vital material is consciously learned and acted upon.

Mapping (to PSLOs or ISLOs): It is the process of aligning course level outcomes with program level and institutional outcomes makes explicit how students achieve these overarching outcomes within the classroom and/or while using a student service. The process also enables faculty and staff to identify potential gaps in curriculum and/or services.

Norming: It is the process of educating raters to evaluate student work and produce dependable scores. Typically, this process uses [anchors](#) to acquaint raters with criteria and scoring rubrics. Open discussions between raters and the trainer help to clarify scoring criteria and performance standards, and provide opportunities for raters to practice applying the rubric to student work. Rater training often includes an assessment of rater reliability that raters must pass in order to score actual student work.

Norm-referenced Assessment: It is an assessment where student performance or performances are compared to a larger group. Usually the larger group or "norm group" is a national sample representing a wide and diverse cross-section of students. Students, schools, districts, and even states are compared or rank-ordered in relation to the norm group. The purpose of a norm-referenced assessment is usually to sort students and not to measure achievement towards some criterion of performance.

Objectives: Objectives refer to the specific or discrete course content that students need to meet in order to pass the class. Objectives usually relate to lower level skills in the Bloom's taxonomy of learning. Objectives are usually more numerous and create a framework for the overarching Student Learning Outcomes which address synthesizing, evaluating and analyzing many of the objectives.

Placement Testing: It is the process of assessing the basic skills proficiencies or competencies of entering college students.

Primary Trait Analysis: PTA involves analyzing assignments in order to identify factors or traits that are to count in the grading of an assignment and to create a scoring [rubric](#) that the teacher can use in grading and students can use in fulfilling the assignment (Barbara E. Walvoord and Virginia Johnson Anderson) After the primary traits are identified, specific criteria with performance standards are defined for each trait. For instance, an essay may have the thesis, development, organization, and grammar as primary traits. Each of those four traits would then be further delineated as to what constitutes "excellent," "good," "average," and "not passing."

Portfolio: It involves a systematic and organized collection of a student's work that exhibits to others the direct evidence of a student's efforts, achievements, and progress over a period of time. It should include representative work, providing a documentation of the learner's performance and a basis for evaluation of the student's progress. Portfolios may include a variety of demonstrations of learning and have been gathered in the form of a physical collection of materials, videos, CD-ROMs, reflective journals, etc. (<http://www.newhorizons.org/strategies/assess/terminology.htm>)

Program: In Title 5, "Program" is defined as a cohesive set of courses that result in a certificate or degree. However, in Program Review, colleges often define programs to include student services as well. As such, a program also may be a cohesive group of courses or activities that support a common set of outcomes.

[Program Review:](#) It is a process of systematic evaluation of multiple variables of effectiveness and assessment of student learning outcomes of an instructional or student services program.

Prompt: It is a short statement or question that provides students a purpose for writing; also used in areas other than writing.

Qualitative Data: Qualitative data are data collected as descriptive information, such as a narrative or portfolio. These types of data, often collected in open-ended questions, feedback surveys, or summary reports, are more difficult to compare, reproduce, and generalize. They are bulky to store and to report; however, they can offer insightful information, often providing potential solutions or modifications in the form of feedback. Qualitative data, such as opinions, can be displayed as numerical data by using Likert-scaled responses that assigns a numerical value to each response (e.g. 5 = strongly agree to 1 = strongly disagree).

Quantitative Data. Quantitative data objectively measures a quantity (i.e. number) such as students' scores or completion rates. These data are easy to store and manage; they can be generalized and reproduced but have limited value due to the rigidity of the responses and must be carefully constructed to be valid.

Reliability: Reliability refers to the reproducibility of results over time or a measure of the consistency when an assessment tool is used multiple times. In other words, if the same person took a test five times, the data should be consistent. This refers not only to reproducible results from the same participant but also to repeated scoring by the same or multiple evaluators.

Rubric. A rubric is a set of criteria used to determine scoring for an assignment, performance, or product. Rubrics may be holistic, providing general guidance with a list of the [primary traits](#), or analytical, assigning specific scoring point values to those primary traits (e.g., 3 as excellent, 2 as average, 1 as needs improvement). Descriptors provide standards for judging the work and assigning it to a particular place on the continuum. A rubric often improves the consistency and accuracy of subjective assessments.

Sampling: Sampling is a research method that selects units such as certain groups of students from a specific population of students being studied, so that by examining the sample, the results can be generalized to the population from which they were selected when everyone in the population has an equal chance of being selected (i.e. random).

Standardized Assessments: They are assessments developed through a consistent set of procedures for designing, administering, and scoring. The purpose of standardization is to assure that all students are assessed under the same conditions so that their scores have the same meaning and are not influenced by differing conditions.

Student Learning Outcomes (SLO): An SLO is a clear statement of what a student should learn and be able to demonstrate upon completing a course or program. It describes the assessable and measurable knowledge, skills, abilities or attitudes that students should attain by the end of a learning process.

Student Self Reflection: It involves student ratings of their knowledge, skills and attitudes; this can provide useful indirect evidence of student learning and also helps students develop metacognitive skills (Suskie, p. 139)

Success Criterion: Also referred to as the “benchmark,” the success criterion are the performance standards that determine whether or not a student has achieved a given level of knowledge or skill proficiency.

Summative Assessment: A summative assessment is a final determination of knowledge, skills, and abilities. This could be exemplified by exit or licensing exams, senior recitals, or any final evaluation that is not created to provide feedback for improvement but is used only for final judgments. A midterm exam may fit in this category if it is the last time the student has an opportunity to be evaluated on specific material. See Formative assessment, its opposite.

Validity: It is the extent to which an assessment measures what it is supposed to measure. A valid standards-based assessment is aligned with the standards intended to be measured, provides an accurate and reliable estimate of students' performance relative to the standard, and is fair.

Adapted from:

Academic Senate for California Community Colleges' "SLO Terminology Glossary - A Resource for Local Senates" <http://www.asccc.org/papers/slo-terminology-glossary-resource-local-senates> --

Community College of Allegheny County's "Assessment of Student Learning Glossary" <http://www.ccac.edu/default.aspx?id=149887>

UCLA's Graduate School of Education "CRESST Assessment Glossary" <http://www.cse.ucla.edu/products/glossary.php>

Appendix A:

Skyline College's Student Learning Outcomes Assessment Cycle (SLOAC) Philosophy

Skyline College is committed to facilitating student success. One means to fulfill this mission is through the Student Learning Outcomes Assessment Cycle (SLOAC), which asks campus constituents to engage in reflective practice. Properly conceived, the SLOAC should be first and foremost about improving student learning. As such, Skyline stands by the American Association of Higher Education's (AAHE) "Nine Principles of Good Assessment" (see Appendix B), the first principle being that "Assessment is not an end in itself but a vehicle for educational improvement."

Skyline is well aware that in any evaluation of student learning, the use of Student Learning Outcomes (SLOs) is only one component of a general profile. The Council for Higher Education (CHEA) Board of Directors' Statement of Mutual Responsibilities for Student Learning Outcomes (September 2003) prudently affirms that "judgments about quality are complex and must be based on a range of factors, including the purposes, resources, processes, and values of an institution...In applying these guidelines, it is imperative for accrediting agencies-- as well as the institutions and programs they accredit-- to avoid narrow definitions of student learning or excessively standardized measures of student achievement."

Skyline also agrees with the mandate of the Academic Senate of California Community Colleges that a successful SLOAC must engage faculty and be faculty driven (ASCCC Resolution 2.01 F04 "Insistence that SLO Design Originate with Local Faculty"). The responsibility for teaching and learning lies primarily with faculty, who are well versed in their disciplines, invested in student learning, and knowledgeable about the principles of their respective and professional associations and licensing boards. Therefore, faculty must play a central role in developing explicit statements of what students will learn on the course, program, and institutional levels as well as interpreting and determining the implications of data. Secondly, the use of SLOs at the department or individual course level should not be prescriptive or intrusive on the principle of academic freedom (ASCCC Resolution 2.01 F03 "Protection of Academic Freedom and Privacy of Students and Faculty").

The aforementioned is not meant to obviate the importance of collaboration between faculty, classified staff, administrators, and students to achieve our institutional goals. On the contrary, Skyline recognizes that the SLOAC "foster[s] wider improvement when representatives from across the educational community [student services staff, other key members of the college's support system, and students] are involved" (AAHE assessment principle #6). Clearly discussion will be enhanced with participation by all parties with a stake in improving student learning.

Skyline also is committed to institutionalizing the SLOAC. The initiative cannot be simply an empty exercise in data gathering and reporting. Nor should said data be used to evaluate individual faculty (ASCCC Resolution 2.01 F03 "Protection of Academic Freedom and Privacy of Students and Faculty"). Rather, information about learning outcomes should be an integral part of decision making ranging from the curricular level to the planning and budget level. Accordingly, Skyline affirms the AAHE's assessment principle #7: "The point of

assessment is not to gather data and return 'results': it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continuous improvement."

The decisions about the development and application of the SLOAC are a collective responsibility of faculty, administrators, and accrediting agencies. Nonetheless, the responsibility for the interpretation and local implementation of the SLOAC shall remain within the purview of individual faculty/ department/ programs or student services units. As such, the SLOAC initiative will serve as a means to optimize student learning.

Approved in April 2005 by:

Nick Kapp, President,
Academic Senate

Victoria P. Morrow, President

Christine Roumbanis, Co-chair
Curriculum Committee

Regina Stanback-Stroud, Vice President
of Instruction

Arthur Takayama, Co-chair
Curriculum Committee

Judith Redwine, Interim Vice
President of Student Services

Donna Elliott, President
Classified Council

Ilka Barcala, President
Associated Students of Skyline College

Karen Wong, SLOAC Chair

Appendix B:

American Association of Higher Education's (AAHE) “Nine Principles of Good Practice for Assessing Student Learning”

- 1. The assessment of student learning begins with educational values.** Assessment is not an end in itself but a vehicle for educational improvement. Its effective practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strive to help them achieve. Educational values should drive not only *what* we choose to assess but also *how* we do so. Where questions about educational mission and values are skipped over, assessment threatens to be an exercise in measuring what's easy, rather than a process of improving what we really care about.
- 2. Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.** Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving our students' educational experience.
- 3. Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.** Assessment is a goal-oriented process. It entails comparing educational performance with educational purposes and expectations -- those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. Where program purposes lack specificity or agreement, assessment as a process pushes a campus toward clarity about where to aim and what standards to apply; assessment also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for assessment that is focused and useful.
- 4. Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.** Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way -- about the curricula, teaching, and kind of student effort that lead to particular outcomes. Assessment can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.
- 5. Assessment works best when it is ongoing not episodic.** Assessment is a process whose power is cumulative. Though isolated, "one-shot" assessment can be better than none, improvement is best fostered when assessment entails a linked series of activities undertaken over time. This may mean tracking the process of individual students, or of cohorts of students; it may mean collecting the same examples of student performance or using the same instrument semester after semester. The point is to monitor progress toward intended goals in a spirit of continuous improvement. Along the way, the assessment process itself should be evaluated and refined in light of emerging insights.

6. Assessment fosters wider improvement when representatives from across the educational community are involved. Student learning is a campus-wide responsibility, and assessment is a way of enacting that responsibility. Thus, while assessment efforts may start small, the aim over time is to involve people from across the educational community. Faculty play an especially important role, but assessment's questions can't be fully addressed without participation by student-affairs educators, librarians, administrators, and students. Assessment may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, assessment is not a task for small groups of experts but a collaborative activity; its aim is wider, better-informed attention to student learning by all parties with a stake in its improvement.

7. Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about. Assessment recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of assessment is not to gather data and return "results"; it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continuous improvement.

8. Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change. Assessment alone changes little. Its greatest contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. On such campuses, the push to improve educational performance is a visible and primary goal of leadership; improving the quality of undergraduate education is central to the institution's planning, budgeting, and personnel decisions. On such campuses, information about learning outcomes is seen as an integral part of decision making, and avidly sought.

9. Through assessment, educators meet responsibilities to students and to the public. There is a compelling public stake in education. As educators, we have a responsibility to the publics that support or depend on us to provide information about the ways in which our students meet goals and expectations. But that responsibility goes beyond the reporting of such information; our deeper obligation -- to ourselves, our students, and society -- is to improve. Those to whom educators are accountable have a corresponding obligation to support such attempts at improvement.

Authors: Alexander W. Astin; Trudy W. Banta; K. Patricia Cross; Elaine El-Khawas; Peter T. Ewell; Pat Hutchings; Theodore J. Marchese; Kay M. McClenney; Marcia Mentkowski; Margaret A. Miller; E. Thomas Moran; Barbara D. Wright

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Appendix C: Spring 2012 Academic Senate Resolutions

RESOLUTION 1:

Support of Faculty Role and Responsibility in the Development and Use of Student Learning Outcomes to Improve Student Learning and Program Effectiveness

WHEREAS, The values of Skyline College include a commitment to academic rigor and quality with relevant, recent, and evolving curriculum ([Values Statement, 2010- 2011](#));

WHEREAS, The professional duties and responsibilities of faculty include evaluation of student performance and evaluation and revision of courses and programs ([AFT Contract Appendix D, 2006-2009](#));

WHEREAS, The Academic Senate for California Community Colleges maintains that “outcomes assessment is a productive activity that can improve teaching practices and thus enhance student learning,” and that “faculty should engage in SLO development and assessment not because it is a requirement for accreditation but rather because it is good professional practice that can benefit programs and students” ([Guiding Principles for SLO Assessment, 2010](#));

WHEREAS, The 2002 Accreditation Standards of ACCJC require that colleges incorporate measurable student learning outcomes at the course, program, degree and institutional level;

WHEREAS, The assessment of learning outcomes is an integral strategy in achieving the College Goals ([Goals and Strategies, 2010 Update](#));

WHEREAS, The [California Education Code §70902 \(b\) \(7\)](#) makes direct reference to “the right of academic senates to assume primary responsibility for making recommendations in the areas of curriculum and academic standards;”

WHEREAS, The Academic Senate for California Community Colleges supports the embedding of SLO assessment in program review ([Resolution 9.05, 2010](#));

WHEREAS, The Academic Senate of Skyline College maintains the primary, active and essential role of faculty in articulating and assessing SLOs, and analyzing the data and its implications ([SLOAC Philosophy Statement for Skyline College, 2005](#));

WHEREAS, the development and assessment of student and program learning outcomes does not infringe upon Academic Freedom as defined by the *1940 Statement of Principles on Academic Freedom and Tenure with 1970 Interpretive Comments* ([AAUP Policy Tenth Edition, 2006](#));

RESOLVED, That the Academic Senate of Skyline College supports the primary role and responsibility of faculty in the development and assessment of course, program, and institutional student learning outcomes;

FURTHER RESOLVED, That the Academic Senate of Skyline College maintains that the processes established for assessment of course, program, and institutional student learning outcomes should be

designed to empower faculty to improve their professional abilities as educators and to encourage meaningful collegial dialogue about improving student learning and program effectiveness.

RESOLUTION 2:

Opposed to the Use of Student Learning Outcome Attainment in Faculty Evaluation

WHEREAS, Standard III.A.1.c of the [2002 Accreditation Standards](#) states, “Faculty and others directly responsible for student progress toward achieving stated student learning outcomes have, as a component of their evaluation, effectiveness in producing those learning outcomes;”

WHEREAS, Varying and conflicting interpretations of Standard III.A.1.c have caused concern among faculty and institutions and have not been clarified by the “Questions to Use in Institutional Evaluation” provided by the [ACCJC Guide to Evaluating Institutions, 2011](#);

WHEREAS, The Academic Senate of Skyline College declared that the results from assessing student learning outcomes will not be used “punitively or as a means of determining faculty or staff salaries or rewards” ([SLOAC Framework Statement of Principles on Assessment, 2005](#));

WHEREAS, The Academic Senate for California Community Colleges states that “using SLOs as a basis for faculty evaluations (III.A.1.c) demonstrates an egregious disregard for local bargaining authority and interjects a threatening tone into what the ACCJC claims is a collegial peer process” ([The Accreditation Standards: Implementation, 2004](#));

WHEREAS, The Academic Senate for California Community Colleges affirmed its “opposition to including the attainment of student learning outcomes as an aspect of individual faculty evaluations,” and declared its intent to work with ACCJC “to ensure that accreditation recommendations do not use student learning outcomes in any manner that would undermine either local bargaining authority or the academic freedom of individual faculty members” ([Resolution 2.01, 2008](#));

RESOLVED, That the Academic Senate of Skyline College affirms its resistance to including the results from assessing student learning outcomes as an aspect of individual faculty evaluations, but rather should be used for course and program improvement;

FURTHER RESOLVED, That the Academic Senate of Skyline College will work with the ACCJC and with other concerned statewide faculty organizations to ensure that accreditation recommendations do not use student learning outcomes in any manner that would undermine either local bargaining processes or the academic freedom of individual faculty members.

**RESOLUTION 3:
Support for a Meaningful and Sustainable Workload**

WHEREAS, Faculty's primary responsibility is to their students, some of whom face significant economic, academic, and social challenges;

WHEREAS, Faculty support student success in multiple ways that require their energy and time, ranging from engaging and innovative classroom curricula and instruction to individual assistance to formal processes such as program review;

WHEREAS, the SLOAC is one model required by accreditation to discuss student success and act on these realizations, so all departments should be engaged in it annually ([Accreditation Standards, 2002](#));

WHEREAS, Faculty take ownership over the SLOAC process, ranging from determining which courses are most important to assess, how to assess, and how to interpret the results ([Statement of Principles on Assessment, 2005](#));

WHEREAS, Faculty insist on a SLOAC process that is meaningful rather than perfunctory, that it makes a difference for our students;

WHEREAS, Some departments/ programs are staffed by only one full-time faculty member, and/or are staffed predominantly by adjunct faculty, and are therefore shouldering a disproportionate number of responsibilities for assessment purposes;

WHEREAS, adjunct faculty constitute a significant percentage of instructors and are welcome and strongly encouraged to participate in the SLOAC but may not be able to due to other professional obligations;

RESOLVED, That the Academic Senate of Skyline College support faculty participating in the SLOAC process while also determining what is manageable, sustainable, and meaningful for their respective department, given the resources that are available to them to foster student success.

RESOLUTION 4:

Support of Publication of Student and Program Learning Outcomes

WHEREAS, The values of Skyline College include a commitment to academic rigor and quality with relevant, recent, and evolving curriculum ([Values Statement, 2010- 2011](#))

WHEREAS, the placement of student learning outcomes on instructor syllabi supports and does not infringe upon Academic Freedom as defined by the *1940 Statement of Principles on Academic Freedom and Tenure with 1970 Interpretive Comments* ([AAUP Policy Tenth Edition, 2006](#));

WHEREAS, the SLOs are a binding part and driving force of what is taught since faculty are required to follow the principles of the course outline of record, but faculty retain academic freedom in HOW they help students to achieve the SLOs;

WHEREAS, Recognition and implementation of specified student learning outcomes ensures that a student taking any section of a course will be expected to achieve the same fundamental outcomes, regardless of the method of instruction utilized;

WHEREAS, When academic standards and expectations are made transparent, students have a clear understanding of what is required of them in order to attain a desired level of academic success;

WHEREAS, Many students experience greater motivation to learn when they understand how a course or program may benefit them and further their educational and professional goals;

WHEREAS, The Academic Senate for California Community Colleges supports the alignment of SLOs from the course level upward through the program and institutional level ([Guiding Principles for SLO Assessment, 2010](#));

WHEREAS, Standard II.A.6 of the [2002 Accreditation Standards](#) requires that the college “describes its degrees and certificates in terms of their purpose, content, course requirements, and expected student learning outcomes. In every class section students receive a course syllabus that specifies learning outcomes consistent with those in the institution’s officially approved course outline;”

WHEREAS, In its *Rubric for Evaluating Institutional Effectiveness - Part III: Student Learning Outcomes*, ACCJC requires that “students demonstrate awareness of goals and purposes of courses and programs in which they are enrolled;”

RESOLVED, That the Academic Senate of Skyline College strongly encourages all faculty to promote transparency and accountability by including student learning outcomes in their course syllabus and supports the publication of program learning outcomes for degrees and certificates in the College Catalog and college website.

RESOLUTION 5:

Support for the Performance Evaluation Review Committee (PERC) to Address the ACCJC Requirement Pertaining to the SLOAC and Faculty Evaluation

WHEREAS, The professional duties and responsibilities of faculty include evaluation of student performance and evaluation and revision of courses and programs ([AFT Contract Appendix D, 2006-2009](#));

WHEREAS, The faculty of Skyline College are committed to the development, use and assessment of student learning outcomes and program learning outcomes as a means of improving student learning and program effectiveness ([SLOAC Framework, 2005](#));

WHEREAS, the Accreditation visiting teams in Fall 2007 recommended all three colleges to address [Standard III.A.1.c of the 2002 Accreditation Standards](#), which states, “Faculty and others directly responsible for student progress toward achieving stated student learning outcomes have, as a component of their evaluation, effectiveness in producing those learning outcomes” ([Skyline Visiting Team Evaluation Report, 2007](#));

WHEREAS, The Academic Senate of Skyline College is opposed to including the results from assessing student learning outcomes as an aspect of individual faculty evaluations;

WHEREAS, Reflection on instructional and assessment practices and results are hallmarks of good educators, and evaluation and revision of curricula and programs are professional obligations;

RESOLVED, That the Academic Senate of Skyline College requests that the PERC address the ACCJC requirement pertaining to faculty evaluation and the SLOAC.

Note: The PERC was renamed the Performance Evaluation Task Force (PETF).

Appendix D: Bloom's Taxonomy

Cognitive Domain

Learning Outcomes Related To Knowledge

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Student remembers or recognizes information or specifics as communicated with little personal assimilation.	Student grasps the meaning behind the information and interprets, translates, or comprehends the information.	Student uses information to relate and apply it to a new situation with minimal instructor input.	Student discriminates, organizes, and scrutinizes assumptions in an attempt to identify evidence for a conclusion.	Student creatively applies knowledge and analysis to integrate concepts or construct an overall theory.	Student judges or evaluates information based upon standards and criteria, values and opinions.
Cite Label List Enumerate Identify Imitate Match Name Quote Recall Reproduce State Write	Convert Define Describe Discuss Estimate Explain Generalize Identify Illustrate Locate Paraphrase Restate Summarize	Apply Chart Compute Demonstrate Determine Dramatize Establish Make Manipulate Prepare Project Solve Use	Analyze Compare Contrast Correlate Diagram Dissect Differentiate Distinguish Infer Investigate Limit Outline Separate	Assemble Create Construct Design Develop Formulate Generate Hypothesize Initiate Invent Modify Reframe Synthesize	Access Appraise Conclude Critique Decide Defend Diagnose Evaluate Judge Justify Rank Recommend Support

Basic
Knowledge
Level

More Sophisticated
Higher Level Thinking
Critical Thinking

Psychomotor Domain

Learning Outcomes Related To Skills

Observe	Model	Recognize Standards	Correct	Apply	Coach
Students translate sensory input into physical tasks or activities.	Students are able to replicate a fundamental skill or task.	Students recognize standards or criteria important to perform a skill or task correctly.	Students use standards to evaluate their own performances and make corrections.	Students apply this skill to real life situations.	Students are able to instruct or train others to perform this skill in other situations.
Hear Identify Observe See Smell Taste Touch Watch *Usually no outcomes or objectives written at this level.	Attempt Copy Follow Imitate Mimic Model Reenact Repeat Reproduce Show Try	Check Detect Discriminate Differentiate Distinguish Notice Perceive Recognize Select	Adapt Adjust Alter Change Correct Customize Develop Improve Manipulate Modify Practice Revise	Build Compose Construct Create Design Originate Produce	Demonstrate Exhibit Illustrate Instruct Teach Train

Basic Knowledge
 Basic Skills
 Level

More Sophisticated Skills
 Higher Level Abilities
 Critical Understanding of Performance

Affective Domain

Learning Outcomes Related To Attitudes, Behaviors, and Values

Receiving	Responding	Valuing	Organizing	Characterizing
Students become aware of an attitude, behavior, or value.	Students exhibit a reaction or change as a result of exposure to an attitude, behavior, or value.	Students recognize value and display this through involvement or commitment.	Students determine a new value or behavior as important or a priority.	Students integrate consistent behavior as a naturalized value in spite of discomfort or cost. The value is recognized as a part of the person's character.
Accept Attend Describe Explain Locate Observe Realize Receive Recognize	Behave Comply Cooperate Discuss Examine Follow Model Present Respond Show Studies	Accept Adapt Balance Choose Differentiate Defend Influence Prefer Recognize Seek Value	Adapt Adjust Alter Change Customize Develop Improve Manipulate Modify Practice Revise	Authenticate Characterize Defend Display Embody Habituate Internalize Produce Represent Validate Verify

Basic Knowledge
Basic Skills
Level

More Sophisticated Skills
Higher Level Abilities
Critical Understanding of Performance

Appendix E:

Objective or SLO, a Practice Exercise

The statements below were written for programs and courses. Analyze the statements to determine whether they are objectives, or student learning outcomes. Write O for objectives and SLO for student learning outcome.

1.	(Public Speaking course) Critically listen to a publicly delivered speech and analyze the credibility of the content and the effectiveness of delivery.
2.	(Fundamental Mathematics) Apply the “Pythagorean theorem” to find any side of a right triangle given the other two sides.
3.	(Music) Successfully perform a selection of choral ensemble pieces in English and other languages in front of a classroom audience.
4.	(Biology) Provide non-biology majors with a solid ground of biological principles.
5.	(Philosophy of Religion) Read and comprehend primary works by (or secondary works about) the central figures in the history of the discipline.
6.	(Physical Education) Improve fitness levels, increase strength and flexibility, and lose body fat through participation in a variety of fitness activities.
7.	(Computer Studies) Cover assembly language programming: addressing; loops; arithmetic, subroutines, stack, recursion; macros; program design and testing; interfacing to high level language.
8.	(Spreadsheets) Create a professional looking spreadsheet using MS Excel spreadsheets which includes accurate functions, charting and is properly formatted adhering to good spreadsheet design.
9.	(Developmental Writing) Demonstrate critical reading, writing, and thinking skills through analysis, synthesis, and evaluation of important ideas from multiple points of view.
10.	(Engineering) Use the techniques, skills, and modern engineering tools necessary for engineering practice to solve a defined engineering problem.

Answers:

1. SLO

2. O

3. SLO

4. O

5. O

6. SLO

7. O

8. SLO

9. SLO

10. SLO

Appendix F: Student Learning Outcomes Checklist

	Yes	No
Do the SLOs include active verbs?		
Can the SLOs be assessed?		
Do the SLOs address the expected level of learning using Bloom's Taxonomy as a guideline? (See Appendix D.)		
<p>Are the SLOs written as outcomes rather than as objectives?</p> <ul style="list-style-type: none"> • Language indicates an important overarching concept versus small lessons or discrete objectives. • Outcomes address what a student will be able to do at the completion of the course, program or service. • SLOs address student competency rather than content coverage. 		
<p>Are the SLOs appropriate?</p> <ul style="list-style-type: none"> • They are consistent with the course outline of record. • They represent a fundamental result of the course. • If applicable, they align with other courses in a sequence. • They represent collegiate-level work. 		
Will students understand the SLOs?		
If "no" in any category, what will you revise?		

Appendix G

Student Learning Outcomes Worksheet -- Instructional Generated from Assignment/Projects/Tests	
Course Name and Number: _____	
Major Assignments, Projects, or Tests and their Rationale	Outcome Knowledge Skill/Ability or Attitude that a Student Can Demonstrate upon Completion of a Course or Program

Appendix H

Student Learning Outcomes Worksheet -- Instructional Generated from Objectives

Course Name and Number: _____

Related Objectives Skills, Tools, and/or Content that Instructors Provide and their Rationale	Outcome Knowledge Skill/Ability or Attitude that a Student Can Demonstrate upon Completion of a Course or Program

Appendix I

**Student Learning Outcomes Worksheet – Student Services
Generated from Existing Data/ Assignment/Projects/Tests/ Tasks**

Course Name and Number (if applicable): _____

Major Assignments, Projects, Tests, and Tasks and their Rationale	Outcome Knowledge Skill/Ability or Attitude that a Student Can Demonstrate upon Utilization of a Student Support Services Unit

Appendix J

Student Learning Outcomes Worksheet – Student Services Generated from Skills, Tools, and/or Content Provided

Course Name and Number: _____

Related Objectives Skills, Tools, and/or Content that Student Services Staff Provide and their Rationale	Outcome Knowledge Skill/Ability or Attitude that a Student Can Demonstrate upon Utilization of Student Support Services Unit

Appendix K:
Aligning Major Assignments and Activities with SLOs

COURSE NAME AND NUMBER:				
ASSIGNMENTS:	SLO 1	SLO 2	SLO 3	SLO 4

Appendix L:
Aligning Major Assignments and Activities with Objectives

COURSE NAME AND NUMBER: _____

Brief Description of the Assignment

Which SLOs the Assignment Addresses

Objectives: Skills/Tools/Subject Materials Needed for Students to Complete the Assignment

	Respond to bias; be fair-minded.								
	Apply accurate and logical analysis to achieve desired outcome.								
Effective Communication:	Comprehend, analyze, and respond appropriately to oral, written, and other sensory information.								
	Effectively express ideas through speaking and writing.								
Information Literacy:	Effectively locate and access information in numerous formats using a variety of appropriate search tools.								
	Evaluate the relevance, quality, and credibility of a wide variety of information sources using critical thinking and problem solving skills.								
Lifelong Wellness:	Demonstrate an understanding of physical fitness and its role in lifelong wellness.								
	Take personal responsibility for identifying academic and psycho-social needs, determining resources, and accessing appropriate services.								

Appendix O:

Skyline College Guiding Principles of Assessment

Adapted from Palomar College Statement of Principles on Assessment, 2000

WHY DO ASSESSMENT?

The Skyline College Values Statement affirms the College's commitment to "academic rigor and quality with relevant, recent, and evolving curriculum" and our College Goals include development of "the scope, quality, accessibility, and accountability of instructional and student service offerings, programs and services." To carry out that commitment, Skyline will develop and continuously refine an institutional framework for assessing student learning and for using the results of such assessment to better serve our students.

The value of assessment is also recognized at the state level. The Academic Senate for California Community Colleges maintains that "outcomes assessment is a productive activity that can improve teaching practices and thus enhance student learning," and that "faculty should engage in SLO development and assessment not because it is a requirement for accreditation but rather because it is good professional practice that can benefit programs and students" (Academic Senate for California Community Colleges, *Guiding Principles for SLO Assessment, 2010*).

WHAT IS THE PURPOSE OF ASSESSMENT?

At Skyline, the fundamental purpose of assessment is to understand, and thereby improve, student success. Additional and more specific purposes of assessment at Skyline include:

- To provide improved feedback, guidance, and mentoring to students in order to help them better plan and execute their educational programs.
- To provide improved feedback about student learning to support faculty and staff in their work.
- To help design and modify programs to better promote learning, access, and student success.
- To improve student learning and development in classes, in programs, and across the college.
- To develop common definitions and benchmarks for important student abilities that will enable us to act more coherently and effectively to promote student learning.

- To help us understand how different groups of students experience the college differently so as to adapt our courses and programs to the needs and capacities of all students.
- To help us understand how our different courses and programs affect students over time and to better coordinate and sequence the students' experience to produce deeper learning.
- To assess student learning to measure student progress, but also to discover ways to make our teaching more effective. If we notice consistent holes in what our students know or can do, we can focus our energies on finding ways to fill those gaps. In addition, assessment can serve as a learning tool in itself. That is, a student learns by preparing for and completing the assessment.

WHAT IS AUTHENTIC AND MEANINGFUL ASSESSMENT?

Skyline College Academic Senate resolves that, "Faculty insist on a SLOAC process that is meaningful rather than perfunctory, that it makes a difference for our students." (*Five Resolutions on the Purpose and Function of SLO's at Skyline College and Faculty Roles and Responsibilities, Resolution 3, April 2012*).

This statement succinctly restates Skyline College's "Students First" approach to the SLOAC. As faculty we are committed to working together to find commonality in what is important for students to be able to know and do after walking through our doors. We let our differences in content be secondary and our differences in delivery enable us to shine.

Further, to gather data we use assessments that foster student learning as well as monitor student progress. The benefit of using the SLOAC is that it increases teacher collaboration, provides transparency of purpose to our students, and a focus on specific, collaboratively-determined core competencies.

GUIDING PRINCIPLES OF ASSESSMENT AT SKYLINE COLLEGE

- Assessment is useful and valuable because it helps us evaluate and improve teaching and learning. Information gained from assessment is used to improve student preparedness for effective learning in our programs.

- Individual faculty members continue to exercise their best professional judgment in matters of grading and discipline.
- It is valid to assess an appropriate and representative sample of students in order to learn about the effectiveness of our academic and student services programs.
- Assessment can be quantitative and/or qualitative. While numerical scales or rubrics (such as the four-point grading scale) can be useful, their accuracy always depends on the clear understanding of the concepts behind the numbers. Often the best indicator of student learning can be expressed better as a narrative or a performance instead of a number.
- Assessment is an ongoing observation of student success, and therefore includes both formative and summative assessment data. It is important to seek multiple judgments of student learning rather than a single measure when possible.
- Assessment can include, but is not limited to only grading or testing.
- The criteria for assessment are made explicit to students so that they can self-assess and continuously improve their own performance.
- Skyline faculty, in consultation with the entire college community, identify the skills and knowledge to be assessed. This community may include transfer institutions and those who employ our graduates.
- Students are assessed throughout their college experience in order to evaluate their ongoing progress.

Works Cited

Angelo, T., (1995). "Improving Classroom Assessment to Improve Learning: Guidelines from Research and Practice", Assessment Update, 7 (6). 1-2, 12-13. *Handbook of California Articulation Policies and Procedures* (2001 edition)
<http://onlinelibrary.wiley.com/doi/10.1002/au.v7:6/issuetoc>

Adapted from Palomar College, <http://www.palomar.edu/alp/principles.html>, 2000.

Appendix P:

Student Activities and Assignments—Pros and Cons for Assessment

Student Activity/Assignment	Data Direct or Indirect	Domain Cognitive, Psychomotor, or Affective	Formative or Summative	Bloom's Knowledge, Comprehension, Application or Analysis/Synthesis/Eval		
Abbreviation	D or I	C, P or A	F or S	K, C, A, ASE	Pros	Cons
Multiple Choice Exam	D	C	F & S	K, C If carefully constructed A, S, & E	easy to grade; objective	reduces assessment to multiple choice answers
Licensing Exams	D	C	S	K, C, A	easy to score and compare	no authentic testing, may be outdated
Standardized Cognitive Tests	D	C	S	K, C, A?	comparable between students	heavily dependent on exposure to topics on test
Checklists	D	C, A, P	F, S	variable	very useful for skills or performances; students know exactly what is missing	can minimize large picture and interrelatedness; evaluation feedback is basically a yes/no - present/absent - without detail
Essay	D	C, A	F, S	K, C, A, ASE	displays analytical and synthetic thinking well	time consuming to grade, can be subjective
Case Study	D	C, A	F, S	K, C, A, ASE	displays analytical and synthetic thinking well; connects other knowledge to topic	creating the case study can be time consuming; dependent on student knowledge form multiple areas

Student Activity/ Assignment	Data Direct or Indirect	Domain Cognitive, Psychomotor, or Affective	Formative or Summative	Bloom's Knowledge, Comprehension, Application or Analysis/ Synthesis/Eval		
Problem Solving	D	C	F, S	K, C, A, ASE	displays analytical and synthetic thinking well; authentic if real world situations are used	difficult to grade due to multiple methods and potential multiple solutions
Oral Speech	D	C	F, S	variable K, C, A, ASE	easily graded with rubric; allows other students to see and learn what each student learned; connects general education goals with discipline-specific courses	can be difficult for ESL students; stressful for students; takes course time; must fairly grade course content beyond delivery
Debate	D	C, A	F, S	K, C, A, ASE	provides immediate feedback to the student; reveals thinking and ability to respond based on background knowledge and critical thinking ability	requires good rubric; more than one evaluator is helpful; difficult for ESL students stressful; for students takes course time
Product Creation & Special Reports	D	C, P, A	F, S	variable K, C, A, ASE	students can display skills, knowledge, and abilities in a way that is suited to them	must have clearly defined criteria and evaluative measures; "the look" cannot override the content

Student Activity/ Assignment	Data Direct or Indirect	Domain Cognitive, Psychomotor, or Affective	Formative or Summative	Bloom's Knowledge, Comprehension, Application or Analysis/ Synthesis/Eval		
Flowchart or Diagram	D	C	F, S	C, A, ASE	displays original synthetic thinking on the part of the student; perhaps the best way to display overall high level thinking and articulation abilities	more difficult to grade, requiring a checklist or rubric for a variety of different answers; difficult for some students to do on the spot
Portfolios	D	C, P	S	variable	provides the students with a clear record of their work and growth; best evidence of growth and change over time; students can display skills, knowledge, and abilities in a way that is suited to them; promotes self-assessment	time consuming to grade; different content in portfolio makes evaluating difficult and may require training; bulky to manage depending on size
Exit Surveys	D, I	A	S	ASE	provides good summative data; easy to manage data if Likert-scaled responses are used	Likert scales limit feedback; open-ended responses are bulky to manage
Performance	D	C, P	F, S	variable K, C, A, ASE	provides best display of skills and abilities; excellent opportunity for peer review; students can display skills, knowledge, and abilities in a way that is suited to them	stressful for students; may take course time; some students may take the evaluation very hard - evaluative statements must be carefully framed

Student Activity/ Assignment	Data Direct or Indirect	Domain Cognitive, Psychomotor, or Affective	Formative or Summative	Bloom's Knowledge, Comprehension, Application or Analysis/ Synthesis/Eval		
Capstone project or course	D	C, P, A	F, S	ASE	best method to measure growth over time with regards to a course or program - cumulative	focus and breadth of assessment and understanding all the variables to produce assessment results are important; may result in additional course requirements; requires coordination and agreement on standards
Team Project	D	C, A	F, S	variable K, C, A, ASE	connects general education goals with discipline-specific courses	must fairly grade individuals as well as team; grading is slightly more complicated; student interaction may be a challenge
Reflective self-assessment essay	D, I	C, A	S	ASE	provides invaluable ability to evaluate affective growth in students	must use evidence to support conclusions, not just self-opinionated assessment
Satisfaction and Perception Surveys	I	C, P, A	S	C, A, ASE	provides good indirect data; data can be compared longitudinally; can be used to determine outcomes over a long period of time	respondents may be influenced by factors other than those being considered; validity and reliability must be closely watched

Chart compiled by Bakersfield's Janet Fulks, Crafton Hills' Gary Williams, and recently retired Long Beach City College's Fred Trapp


Appendix Q:

Samples of Direct and Indirect Measures of Student Learning at the Course, Program, Institutional and Student Services Levels

Level	Direct Measures	Indirect Measures
Course	Course and homework assignments Examinations and quizzes Term papers and reports Observations of field work, internship performance, or service learning Research projects Class discussion participation Case study analysis Oral presentations and performances Portfolios of student work Pre-test and Post-test Video/Audio tape evaluation Other: _____	Course evaluations Test blueprints (outlines of the concepts and skills covered on tests) Percent of class time spent in active learning Number of student hours spent on service learning Number of student hours spent on homework Number of student hours spent at intellectual or cultural activities related to the course Number of student hours spent in contact with faculty outside the classroom Other: _____
Program	Capstone projects, theses, exhibits, or performances Pass rates or scores on licensure, certification, or subject area tests Student publications or conference presentations Employer and internship supervisor ratings of students' performance Other: _____	Focus group interviews Registration or course enrollment data Department or program review data Employer or alumni surveys Student perception surveys Proportion of upper-level courses relative to the same program at other institutions Job placement rates Number of faculty hours spent collaborating Internship evaluation Retention studies Transfer rates Graduation rate Course success rate Diversity statistics Other: _____

Level	Direct Measures	Indirect Measures
Institution	<p>Performance on tests of writing, critical thinking, or general knowledge</p> <p>Rubric (grading scale) scores for class assignments in GE, interdisciplinary core courses, or other courses required by all students</p> <p>Performance on achievement tests</p> <p>Explicit self-reflections on what students have learned as a result of required community service or other experiences</p> <p>Other: _____</p>	<p>Locally-developed, commercial, or national surveys of student perceptions or self-report activities (e.g., National Survey of Student Engagement)</p> <p>Transcript studies that examine patterns and trends of course selection and grading</p> <p>Annual reports including institutional benchmarks</p> <p>Focus group evaluation</p> <p>Tracking Alumni honors/awards</p> <p>Retention studies</p> <p>Study abroad rates</p> <p>Transfer rates</p> <p>Graduation rate</p> <p>Course success rate</p> <p>Diversity statistics</p> <p>Job placement statistics</p> <p>Other: _____</p>
Student Services	<p>Locally developed tests</p> <p>National standardized tests (e.g. CCSEQ, LASSI)</p> <p>National licensure exam</p> <p>Pre and post tests</p> <p>Evaluation of student work samples (portfolios, capstone projects, etc.)</p> <p>Evaluation of student performance on a case study or problem analysis</p> <p>Observation and evaluation of student behavior</p> <p>Externally reviewed internship</p> <p>Other: _____</p>	<p>Home grown or standardized surveys (mailed, online, phone)</p> <p>Focus groups</p> <p>Staff and student journals</p> <p>Academic performance after transfer</p> <p>Exit interviews</p> <p>Analysis of college or departmental records</p> <p>Usage rates</p> <p>Student Satisfaction studies</p> <p>Other: _____</p>

**Appendix R:
Three- Year Schedule of Assessment**

	2013-2014	2014-2015	2015-2016
(F) Fall	<p>Which course(s)' SLOs will you assess each semester? Consider listing courses that are "central" to the ISLO scheduled for assessment, such as "Citizenship" for Spring 2014.</p> <div style="text-align: center;">  </div>		
(SP) Spring			
ISLO Assessment Schedule	(F) Information Literacy (SP) Citizenship	(F) Lifelong Wellness (SP) Effective Communication	(F) Critical Thinking (SP) Citizenship

Appendix S:

Tips on Configuring and Analyzing Assessment Data

Drafting SLOs and gathering assessment results are only the beginning; the substance in assessing lies primarily in analyzing the data and crafting an action plan, should students fall below the benchmark established in the success criteria. Thus, to complete the assessment cycle, you'll need to work with your colleagues to analyze the data and draw conclusions from the findings.

- In which areas did students excel?
- What issues and needs were revealed?
- How do the results compare to any baseline or benchmark data previously collected?
- What insights can you gain from the results?
- Did the assessment work, and if not, what needs to be revised?

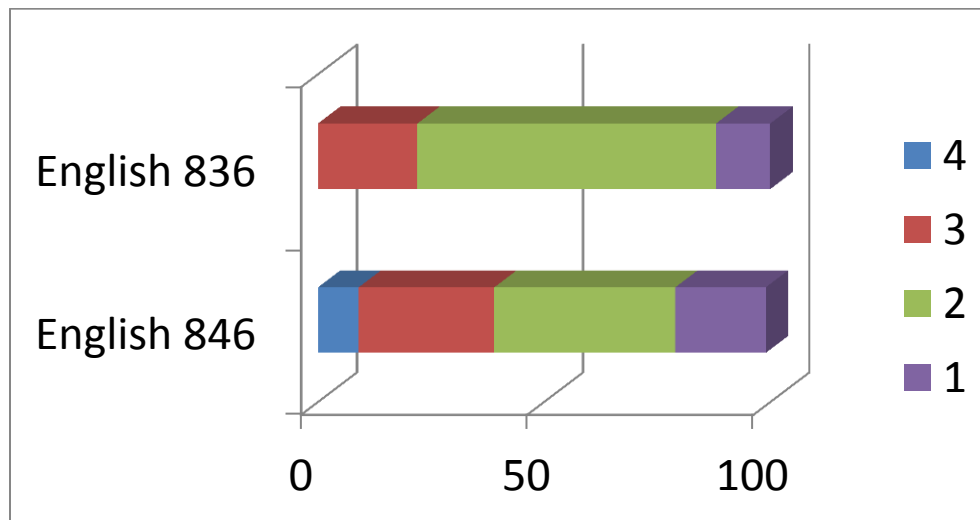
Below are some useful tips and examples that have emerged from current assessment practices.

RUBRICS

Assessing multiple SLOs with one major project or activity and evaluating it with a rubric that encompasses all of the SLOs is efficient use of time and resources. The rubric also articulates what distinguishes the different levels of competency, which is useful for consistent grading and can inform students how their work is being evaluated.

- Be mindful of the SLOs as you create the rubric. Indicate which parts of the rubric pertain to which SLOs in your assessment plan.
- Create an excel spreadsheet to enter the students' scores for each part of the rubric. The first column will be which student (e.g. 1, 2, 3, etc.), and the subsequent columns will be each of the rubric's criteria (i.e., thesis).
- To analyze the data, you can do so in two ways:
 - Calculate the average by using the formula. Compare the average score with the success criterion (e.g. The class will average 2.5 or greater.).
 - Determine the percentage of students that scored 2,3, or 4 if those are passing scores, and then compare it against the success criterion (e.g., 75% of students will score at least 2, "adequate," on the thesis.)

- This way of analyzing data enables you to see which skills students most struggled with. For instance, you may find that 98% of students had at least a 2.2 average, and yet the vast majority only scored 2. The graphic function on Powerpoint really helps to differentiate how students fared. For instance, the graphic below shows how well the students' thesis was on an English assessment.



PRE/POST TESTS

Pre/post tests are a very useful means to measure how much students gained over the course of the semester since you document their starting and end point. The pre-test also helps students know what to anticipate and prioritize for the remainder of the semester.

- Be mindful of which test questions pertain to which SLOs in your assessment plan. Faculty using this strategy typically assign two to three questions per SLO, and all faculty teaching the course that semester include those common questions on their exam(s).
- If you assign multiple choice, matching, and/or true/false questions on these tests, use scantrons so as to tabulate students' results.
- Your success criteria may simply note that you are looking for an overall increase in the percentage of students who answer the designated questions correctly, such as a 10% increase. And/or you may want to decide which percentage of students overall answered the questions correctly, in addition to ensuring that the percentages from the post-test are higher than the pre-tests.
- The challenge that has emerged from using this assessment strategy is comparing the students who started the course with the students that persist until the end, when the post-test is

typically administered. To address this issue, you may want to consider using a scan-tron with students' names on both the pre and post-test so that you can remove the pre-tests from students who didn't persist.

SURVEYS

Surveys can be used to develop students' meta-cognitive awareness, as they're prompted to evaluate their competencies. The primary drawback is that students are assessing themselves, as opposed to a student demonstrating their competencies. In addition to home-grown surveys within a respective department, the Office of Planning, Research, and Institutional Effectiveness (PRIE) may have college-wide surveys they administered (such as the Community College Survey of Student Engagement) whose results are relevant to a particular instructional area.

Surveys also can be used to evaluate student services, such as which services they were aware of, which they used, how frequently, and how satisfied they were with each service. PRIE may have college-wide surveys they administered whose results are relevant to a particular service area.

- Be mindful of the SLOs as you create the survey. Indicate which questions from the survey pertain to which SLOs in your assessment plan.
- The PRIE can help you to design and administer your survey. Easiest is to administer it with a scantron or via the internet, such as through NoviSurvey, for which the PRIE has a license.
- To analyze responses to multiple choice questions, you may want to determine the percentage of students who marked 2, 3, or 4 if all those scores suggest a level of competency in the knowledge, skill, and/or attitude.
- To analyze responses to open-ended questions, which may have captured an insight that your multiple choice questions didn't, you'll need to identify the themes that emerge from students' responses.

FOCUS GROUPS OR STRUCTURED GROUP INTERVIEWS (FOR ASSESSING PSLOs OR STUDENT SERVICES SLOs)

Typically limited to six- to- ten participants, focus groups/ structured group interviews work especially well to gain insights about a program and/or service as a whole. Open-ended questions can address curriculum, such as how well the required coursework prepared students for higher level courses, a position in that field, and/or transfer. Or they can pertain to advising, such as characterizing their advising experiences in the program, what they found useful, and what—if anything, they suggest be changed.

In focus groups, the facilitator may be more flexible and depart from the script of questions so as to follow promising leads that emerge from the conversation. In contrast, the facilitator in a group interview poses only the pre-generated questions. A focus group tends to yield a more in-depth analysis than a structured group interview.

- Be mindful of the PSLOs as you create the questions, and indicate in your assessment plan which questions pertain to which PSLOs. Get feedback from the Office of Planning, Research, and Institutional Effectiveness (PRIE) to design your questions since the quality of the questions will impact the validity of the responses, and also get feedback about whom to include in the focus group/ structured group interview.
- To analyze responses to open-ended questions, you'll need to identify the themes that emerge from students' responses.

Appendix T:

Action Plan Examples

EXAMPLE 1

SLO: Students in CLAS 080 will have the skill, knowledge, and confidence to enter CLAS 100.

Assessment tool: Survey

Success criterion: 70% will strongly agree with Questions 5-9 of the 12 question survey.

Result: 60% of students strongly agreed with Q 5, 6, 7, 80% on Q9

Dialogue: Faculty reviewed the final exam and the results of the relevant questions addressed in the survey. Reviewing student work confirmed for faculty that students did have a strong grasp of the skills necessary to succeed at the next level. Faculty agree that students are learning course material without an awareness of the skills they were developing and the skills needed at the next level. Faculty decided to increase students' awareness of the course learning outcomes for the course they are enrolled in and explicitly link course assignments to outcomes.

Action Plan: The course syllabus will list major assignments that fulfill an SLO under each SLO. Faculty will list the SLO that is being addressed in assignments on assignment handouts. At midterm, students will self-assess their progress in achieving each SLO and indicate how prepared they feel to move on to the next class.

EXAMPLE 2

SLO: Students will identify and critically evaluate important ideas in short and book length texts.

Assessment tool: One-page assignment that students will complete after reading a text in which they: (a) identify the important ideas, and (b) evaluate how well the author supports his/her thesis.

Success criterion: a. 90% of students will identify 80% of the important ideas. b. 80% of students will earn a 3 or 4 on the "critical reading" part of the rubric.

Results: a. 86% of students identified 80% or more of the important ideas in the reading. b. 69% of students earned a 3 or higher on the writing assignment.

Dialogue: Discussion of the readings revealed that the faculty members were not in full agreement of which ideas in the readings were “important ideas.” Faculty decided that in future assessments they would like to use a common reading (about four different readings were used for this assessment) and that the full group should determine in advance what the ideas would be regarded as acceptable answers. They felt that an adjusted list of important ideas that included more ideas would bring the student results for (a) closer to 90%. Discussion of the writing assignments revealed that students were more effective in summarizing than evaluating. Faculty agreed to address this skill in the 2013 assessment cycle.

Action plan: Choose a common text to conduct this assessment again in the near future. Prior to the next assessment, devote a department meeting to discuss how to help students evaluate texts, and gather more best practices if the current practices seem insufficient.

Appendix U:
TracDat Generated Course Assessment Plans and Results
(a.k.a. as the Four- Column Report)

English 846: Reading and Writing Connections

ADMJ 100: Introduction to Administration of Justice