SLO/AUO HANDBOOK

A Guide to the Writing, Assessing, and Reporting of Student Learning Outcomes (SLOs) and Administrative Unit Outcomes (AUOs) at Saddleback College

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An Overview of Student Learning Outcomes at Saddleback College

The Student Learning Outcomes (SLO) assessment process is a means to discover if students are, in fact, learning what they are expected to learn in courses and programs throughout the College. The accrediting agency for California Community Colleges (ACCJC) has elected to use SLOs as an integral part of its accrediting standards (see Appendix A). This is, in large part, a response to the U.S. Department of Education call for colleges and universities to engage in a process of continual self-examination and reflection with the goal of improvement.

Saddleback College began a process to implement SLO assessment across the campus in spring 2005. We began with program-level SLOs, and have now added course-level and institutional SLOs. As part of this process, the outcomes and means of assessment are determined by members of a particular department or program for each course and for the program as a whole. Course-level and program-level SLOs are then linked to overarching Institutional SLOs, as shown in the chart below:

The use of assessment results is meant to stimulate discussion and direct activities that can improve instructional delivery and support systems on campus. Results will not be used as the basis of evaluation or disciplinary action for individual faculty members. However, as part of the regular professional duties of faculty, instructors are expected to participate in the SLO process.

The college also requires that all administrative and student support units engage in the assessment of Administrative Unit Outcomes (AUOs). These are similar to SLOs but instead focus on the effective delivery of administrative and support services.

The Educational Planning and Assessment Committee (EPA), a sub-committee of the Academic Senate, is responsible for organizing and facilitating our SLO and AUO efforts. The EPA chair,
along with SLO facilitators and the research specialist, will work directly with departments, faculty members, and administrative units to assist in developing their outcomes, determining the means of assessment, compiling the results of that assessment, analyzing those results, and making changes to their program or unit if necessary in order to improve student learning or the delivery of services. Please visit the EPA website for updated information on all aspects of SLO and AUO development and assessment: [http://www.saddleback.edu/asenate/epa/](http://www.saddleback.edu/asenate/epa/).

Training sessions on SLOs and AUOs are held during in-service and throughout the academic year. Please visit the Institute for Teaching and Learning (ITL) website for more information: [http://www.saddleback.edu/asenate/ITL.html](http://www.saddleback.edu/asenate/ITL.html).

The coordination of SLO development, assessment, and reporting is primarily the work of the department chair. Some departments have selected a different individual to coordinate these efforts. Faculty should contact their department chairs for information on who is responsible for the coordination of these efforts within your department.

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**Quick Contact List:**

How to Write and Assess SLOs..................................................Claire Cesareo-Silva
Programs for Assessing and Results Analysis.................................Shouka Torabi
Inputting SLOs into CurricUNET..............................................Claire Cesareo-Silva
Course-level SLOs in your discipline........................................Department Chair
Reporting of SLOs and AUOs

Course-Level SLOs
Course-level SLOs and their assessment results are reported in the CurricUNET system. Please
see the SLOs in CurricUNET Handbook for instructions on this system. All course-level SLOs will
be linked to an Institutional SLO (ISLO) at the time of input.

Each course taught at the college must have a minimum of 3-5 SLOs associated with it. These
SLOs are a part of the official course outline and are visible by students in the online course
schedule. It is also highly recommended that the official SLOs be placed on course syllabi so
that students are fully aware of what they can expect to learn during the semester.

At least one SLO must be assessed per course each year. Assessment results should be input
into CurricUNET by the third Friday of September following the academic year in which the SLO
was assessed.

Program-Level SLOs and AUOs
Currently, 3-5 program-level SLOs or AUOs must be assessed each year. These are reported on
the Program-Level SLO/AUO Assessment Form found on the EPA website. Results for Program
Level SLOs and AUOs are due to the EPA chair by the third Friday of September following the
academic year in which they were assessed.

Institutional SLOs
Institutional SLOs (ISLOs) are linked to course-level SLOs and therefore generally not
individually assessed. However, there are some ISLOs, such as information competency, which
will be assessed separately. The results of these separate assessments can be found on the EPA
website.

[REMEMBER: ALL SLOs AND AUOs ARE DUE BY THE THIRD FRIDAY OF SEPTEMBER EACH YEAR]
Institutional SLOs

Below are the ISLOs adopted by the Academic Senate in 2009. Each course-level SLO developed must be linked to one of these ISLOs in CurricUNET.

Students completing a degree or transfer program will be able to demonstrate:

- **Effective Communication**
  - Reading Competency
  - Written Communication
  - Oral Communication

- **Intellectual and Practical Skills**
  - Computer Literacy
  - Scientific and Quantitative Reasoning
  - Information Competency
  - Critical and Creative Thinking
  - Teamwork and Problem Solving
  - Skills for Lifelong Learning

- **Community/Global Consciousness and Responsibility**
  - Knowledge of Cultural Diversity
  - Interpersonal Skills
  - Civic Knowledge and Engagement
  - Ethical Reasoning and Action

- **Breadth of Subject Area Knowledge**
  - Natural Sciences and Mathematics
  - Arts and Humanities
  - Social and Behavioral Sciences
The Five-Step Model of Program-Level SLO/AUO Assessment

Saddleback College has selected the Five-Step (or Five-Column) model developed by Dr. James Nichols and Karen Nichols of Institutional Effectiveness Associates to use of SLO/AUO assessment. We believe this is the easiest and most straightforward model available. In July of 2005, the Nichols came to Saddleback College and conducted a two-day intensive training for the team. Other colleagues had attended a training session by the Nichols in December of 2004 at Mt. San Antonio College as well. As a result of this training, the team developed the procedures and forms outlined in this guidebook.

The form for program level-SLO/AUO assessment can be found on the EPA website. Below are the instructions for completing this form.

Step-By-Step Guide to the Five-Step Model:

Step 1: Define the mission and purpose of the program or administrative/service unit.

Step 2: Formulate intended Student Learning Outcomes or Administrative/Service Unit Outcomes.

Step 3: Determine the means of assessment and the criteria for success.

Step 4: Conduct and document assessment activities.

Step 5: Use results to improve program or services.
Step 1: Clearly define the mission and purpose of the instructional program or administrative/service unit.

Each instructional program and administrative unit should begin by defining its mission and purpose. This should be in the form of a mission statement that provides a clear description of the program, what it does, and for whom it does it. The mission statement should be aligned with the College’s vision, mission statement, or goals (see Appendix B), and reflect on how student learning or student services are enhanced by the program and its offerings.

In Column I of the Program-Level SLO/AUO Assessment Form, you should begin by stating the portion of the College’s vision, mission or goals to which the program most closely aligns. Then, insert the program’s mission statement below.

Below are examples of possible mission statements:

The Saddleback College Reading Department is dedicated to facilitating student achievement and academic success by providing courses that increase and enhance reading proficiency in meeting the challenges of college coursework.

The mission of the Electronic Technology program is to educate students coming from diverse backgrounds in the fundamental skills, knowledge, and practice of Electronic Technology in order to prepare them for employment in the field.

The mission of the Saddleback College Counseling Department is to provide current and prospective students with the counseling and instruction necessary to successfully reach their academic, career and personal goals.

Step 2: Formulate intended Student Learning Outcomes or Administrative/Service Unit Outcomes.

Student Learning Outcomes are defined as the knowledge, skills, abilities, attitudes, or habits of mind that students have at the completion of a course, program, activity or interaction. Most of these competencies should be measurable in some way, but some may only be observable (such as values).

Faculty within a department or program should meet to discuss the expected learning outcomes for students who complete a particular series of courses, such as those required for a certificate, an AA/AS degree, or for transfer. Faculty might develop a list of 10-20 SLOs, but for the purposes of yearly assessment no more than three to five should be selected. You may rotate outcomes in and out on a yearly basis from a master list of outcomes depending on the program’s needs and focus.
The outcomes for most administrative/service units (AUOs) are different from SLOs in that they focus on what services the units provide in order to support the mission of the College. AUOs then, unlike SLOs, can look at process and not just intended results. Administrative/Service Units, however, can also have SLOs because they may provide educational support services such as tutoring, workshops, counseling, etc. Administrative and service units should assess no more than three to five outcomes per year.

These outcomes should be listed in Column II of the Program-Level SLO/AUO Assessment Form, using a separate page for each of the outcomes selected.

Writing measurable outcomes is a skill that takes time to master. When writing SLOs:

- **Focus on what the student can do.** Do not address what was taught or presented, but address the observable outcome you expect to see in the student. Think about the knowledge, skills, and attitudes you expect from students who receive a certificate or degree in the program.

  Important Point: SLOs differ from course objectives. Course objectives are generally statements of faculty goals for the course (what you want the learners to achieve) and focus on the content and/or skills that will be presented. SLOs are statements of what the student will be able to do at the end of a course or program.

- **Use active verbs.** Active verbs are easier to measure. For instance, if you want the students to understand how to correctly use a microscope - using the word understand is not measurable. Can you measure understanding? Instead try to imagine the outcome - Students will focus and display an image on the microscope. With this outcome, you can both develop criteria and measure ability. Other active verbs include: describe, classify, distinguish, explain, interpret, compose, perform, demonstrate, etc. (see list of active verbs in Appendix C).

- **Create a singular outcome.** Do not “bundle” outcomes by linking them with “and.”

- **Work with the faculty within your department on writing SLOs.** Since all faculty are responsible for SLO assessment, it is important to come to a consensus on which SLOs are important for the program a whole.

- **Share the outcomes with your students.** Students need to clearly understand what is expected of them. They are unfamiliar with the discipline specific language, so they can help in clarifying the outcomes as well.

- **Modify as you learn from experience.** SLOs should be reviewed and modified yearly. As you assess an SLO, sometimes flaws will be identified in the SLO itself.
Below are examples of correctly formatted program-level SLOs and AUOs:

Graduates of the Business Administration program will be primarily employed in management and functionally related areas.

Students with an AS in Computer Science will demonstrate knowledge of various computer operating systems.

Students with an AA in Spanish will be able to speak the language so as to be understood by a native of a Spanish-speaking culture, using correct pronunciation, stress, rhythm, and intonation.

Graduates of the Cosmetology program will be technically proficient in permanent waving of the hair.

The Student Health Center will increase the utilization of patient services. (AUO)

Students attending resume workshops in the Career Center will produce quality resumes.

Step 3: Determine the means of assessment for each SLO or AUO and the criteria for success.

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

There are two kinds of evidence: direct methods and indirect methods. Both are valid, although indirect methods alone are not considered to be sufficient evidence.

Examples of direct methods of assessment include:

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

- **Classroom Assessment**: Often designed for individual faculty who wish to improve their teaching of a specific course but can also be used on the program level.

- **Collective Portfolios**: Faculty assemble samples of student work from various classes and use the “collective” to assess specific program learning outcomes.
• **Commercially Produced or Standardized Tests**: Commercially generated or standardized tests are used to measure student competencies under controlled conditions. Tests are developed and measured nationally to determine the level of learning that students have acquired in specific fields of study. For example, nationally standardized multiple-choice tests are widely used and assist departments in determining programmatic strengths and weaknesses when compared to other programs and national data.

• **Embedded Questions on Assignments or Exams**: Questions related to program learning outcomes can be embedded within course assignments or exams. For example, all sections of “research methods” could include a question or set of questions relating to your program SLOs. Faculty grade the exams as usual and then use only the exam questions that are linked to the program SLOs for analysis. The findings are reported as an aggregate. This is an especially easy method to use because it does not take much time or effort to distribute the questions and gather the data.

• **Locally Developed Exit Exams**: Faculty can create an objective exam for graduating students that is aligned with the program SLOs. However, this method could be difficult to do at the community college level since not all students get an AA or even select a specific major.

• **Pre-Test/Post-Test Evaluations**: Pre-test/post test assessment is a method used by academic units where locally developed tests and examinations are administered at the beginning and at the end of courses or academic programs. These test results enable faculty to monitor student progression and learning throughout prescribed periods of time. The results are often useful for determining where skills and knowledge deficiencies exist and most frequently develop. This is also a simple and straightforward method to use in many programs.

• **Observations**: Observations of any behavior such as student presentations or students working in the library can be used for assessment. Observations can be recorded as a narrative or in a highly structured format, such as a checklist, and they should be focused on specific program SLOs.

• **Scoring Rubrics**: Rubrics can be used to score any product or performance such as essays, portfolios, recitals, oral exams, etc. A detailed scoring rubric that delineates criteria used to discriminate among levels is developed and used for scoring.

• **Transfer Records**: For community colleges, the data on transfer student success in upper division courses is extremely valuable. Cal-Pass, a system of data sharing between all the systems of higher education in California, can be used for this purpose.

• **Videotape or Audiotape Evaluations**: Videotapes and audiotapes have been used by faculty as a kind of pre-test/post-test assessment of student skills and knowledge. Disciplines, such as theatre, music, art, and communication, which have experienced difficulty in using some of the other assessment methods have had significant success in utilizing videotapes and audiotapes as assessment tools.
Examples of **indirect methods** of assessment include:

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

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

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

- **Student Exit Interviews/Surveys**: Students leaving the college are interviewed or surveyed to obtain feedback. Data obtained can address strengths and weaknesses of the program and/or assess relevant concepts, theories or skills.

Column III of the Program-Level SLO/AUO Assessment Form should list the specific method(s) of assessment you used for each of the SLOs listed, to whom and when the assessments were administered, by whom and how the results were judged, and how well the group of participants were expected to do.

The College research specialist, Shouka Torabi, is there to assist faculty and staff in creating, conducting, and analyzing assessments.

Below are examples of possible assessment methods and criteria for the SLOs listed above:

**SLO**: Graduates of the Business Administration program will be primarily employed in management and functionally related areas.

**Assessment**: On a Graduate Student Survey administered within the first five months of graduation, 50% of the responding graduates will report employment in management or in the related fields of finance, production or marketing.

**SLO**: Students with an AS in Computer Science will demonstrate knowledge of various computer operating systems.
Assessment: In an exam administered at the end of the final course of the program, 90% of graduating students will score an average of 80% or more on the computer operating systems component of the exam.

SLO: Students with an AA in Spanish will be able to speak the language so as to be understood by a native of a Spanish-speaking culture, using correct pronunciation, stress, rhythm, and intonation.

Assessment: 95% of the students taking the ACTFL examination at the time of graduation will receive a “passing score,” as established by the faculty in the Spanish department.

SLO: Graduates of the Cosmetology program will be technically proficient in permanent waving of the hair.

Assessment: Prior to graduation, 90% of the students enrolled in the program will be able to give a perm to two live patrons within a given period of time as evaluated by the Cosmetology program faculty in the Capstone course (COS 400D).

AUO: The Student Health Center will increase the utilization of patient services.

Assessment: Student Health Center records will show a 5% increase in usage over the previous year.

SLO: Students attending resume workshops in the Career Center will produce quality resumes.

Assessment: Using a checklist describing the five quality components of a resume, the Career Center staff will analyze resumes submitted for company referrals. The resumes of 80% of students who attended a current workshop will receive a 4 or greater rating on the checklist, and no single component will be consistently missed.

Step 4: Conduct and document assessment activities.

The conducting of assessment activities is probably the most difficult and time-consuming portion of the process. You should select assessment techniques that are reasonable based on the resources (time, technology, budget) available for your program and for the College.

The College has invested in the Scantron programs Class Climate and ParScore for the assessing of SLOs and AUOs. These are extremely powerful tools which greatly simplify the process of SLO and AUO assessment. Trainings are held periodically on these two programs, or you can contact the Research Specialist for individualized training.
The results of each assessment method should be listed in Column IV of the SLO Assessment Form. Assessment results should come directly from the method listed in Column III, highlight the extent to which the outcome was accomplished, and be in sufficient detail to show that assessment actually took place.

**Step 5: Use the results of assessment for program or service improvement.**

Once the results of assessment have been collected, faculty in a program or staff within an administrative unit should meet to discuss what the results reveal about areas in which the program succeeds and about areas in which improvements can be made. Determinations will then be made on what exactly to do to correct any shortcomings, and action should be taken.

Column 5 of the Program-Level SLO/AUO Assessment Form should only state exactly what has been done, not what you plan to do in the future – therefore the actions listed must be stated in the past tense. The actions should generally be substantive and detailed (list, for example, the specific course number in which changes to the curriculum were made), although there are times when no action is necessary and this can be stated as well.
Course-Level SLOs

Course-level SLOs are essentially the same as program-level SLOs but focus on what a student can expect to learn in individual courses. Our course-level assessment process follows the same steps as the program-level process outlined above, with the exception of the elimination of the first step. In addition, these SLOs are not reported on a form, but input directly into CurricUNET where they are also linked to an ISLO.

Each course taught at the college must have a minimum of 3-5 SLOs associated with it, but only one need be assessed each year.

Below are some examples of course-level SLOs and their assessment method and criteria for success:

<table>
<thead>
<tr>
<th>SLO:</th>
<th>Students who take Anth 1 will be able to explain the four forces of evolutionary change.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment:</td>
<td>In an essay question embedded in the midterm of all sections of Anth 1, 75% of the students will be able to accurately distinguish between mutation, gene flow, genetic drift, and natural selection by scoring at least 4 out of a possible 5.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SLO:</th>
<th>Students in Span 1 will demonstrate a knowledge of historic, political and artistic individuals in Hispanic culture.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment:</td>
<td>In questions embedded in the final exam of all sections of Span 1, 60% of students will be able to demonstrate their knowledge of Hispanic culture by scoring 60% or higher.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SLO:</th>
<th>In ENV 24, students will develop the ability to recognize plants, habitats, and common animals of Southern California.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment:</td>
<td>80% of students completing ENV 24 will score satisfactory or higher on a grading rubric which requires the students to recognize native flora and fauna, and the interrelationships among them and people.</td>
</tr>
</tbody>
</table>
Advantages of Using SLOs

Using SLOs is advantageous on many levels. Below is an outline of some of the benefits of SLOs assessment for the College, for you as an instructor, and for your students.

College Benefits
All accrediting agencies today require colleges to engage in ongoing assessment. Assessment provides the accrediting agency with evidence of student learning and program quality. We engage in SLO assessment, however, not just as an empty exercise to achieve accreditation but because the information gained can allow us to highlight what we do well and help us to improve our programs and services for students in areas where we might be lacking.

Because SLO assessment has become standard in all four-year colleges and universities as well, aligning our SLOs with the SLOs of our primary transfer institutions helps make articulation easier.

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

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

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

Student Benefits
Communicating student learning outcomes to students provides them with an upfront understanding of what they are expected to learn and demonstrate at the end of a course, certificate, or degree. Learning outcomes should not be a mystery to students so it is a good idea to include the SLOs on all course syllabi.

Using SLOs also changes the orientation of the class from what you want to cover to what a student should know or be able to do at the end of the semester. The result of this is a shift to student-centered learning with an emphasis on student activity, interaction and application that leads to higher-level processing.
Appendix A: Excerpts from the ACCJC Standards for Accreditation (underlining added for emphasis)

Standard II: Student Learning Programs and Services

A. Instructional Programs

The institution offers high-quality instructional programs in recognized and emerging fields of study that culminate in identified student outcomes leading to degrees, certificates, employment, or transfer to other higher education institutions or programs consistent with its mission. Instructional programs are systematically assessed in order to assure currency, improve teaching and learning strategies, and achieve stated student learning outcomes. The provisions of this standard are broadly applicable to all instructional activities offered in the name of the institution.

1. The institution demonstrates that all instructional programs, regardless of location or means of delivery, address and meet the mission of the institution and uphold its integrity.
   a. The institution identifies and seeks to meet the varied educational needs of its students through programs consistent with their educational preparation and the diversity, demographics, and economy of its communities. The institution relies upon research and analysis to identify student learning needs and to assess progress toward achieving stated learning outcomes.
   b. The institution utilizes delivery systems and modes of instruction compatible with the objectives of the curriculum and appropriate to the current and future needs of its students.
   c. The institution identifies student learning outcomes for courses, programs, certificates, and degrees; assesses student achievement of those outcomes; and uses assessment results to make improvements.

2. The institution assures the quality and improvement of all instructional courses and programs offered in the name of the institution, including collegiate, developmental, and pre-collegiate courses and programs, continuing and community education, study abroad, short-term training courses and programs, programs for international students, and contract or other special programs, regardless of type of credit awarded, delivery mode, or location.
   a. The institution uses established procedures to design, identify learning outcomes for, approve, administer, deliver, and evaluate courses and programs. The institution recognizes the central role of its faculty for establishing quality and improving instructional courses and programs.
   b. The institution relies on faculty expertise and the assistance of advisory committees when appropriate to identify competency levels and measurable
student learning outcomes for courses, certificates, programs including general and vocational education, and degrees. The institution regularly assesses student progress towards achieving those outcomes.

c. High-quality instruction and appropriate breadth, depth, rigor, sequencing, time to completion, and synthesis of learning characterize all programs.

d. The institution uses delivery modes and teaching methodologies that reflect the diverse needs and learning styles of its students.

e. The institution evaluates all courses and programs through an on-going systematic review of their relevance, appropriateness, achievement of learning outcomes, currency, and future needs and plans.

f. The institution engages in ongoing, systematic evaluation and integrated planning to assure currency and measure achievement of its stated student learning outcomes for courses, certificates, programs including general and vocational education, and degrees. The institution systematically strives to improve those outcomes and makes the results available to appropriate constituencies.

g. If an institution uses departmental course and/or program examinations, it validates their effectiveness in measuring student learning and minimizes test biases.

h. The institution awards credit based on student achievement of the course’s stated learning outcomes. Units of credit awarded are consistent with institutional policies that reflect generally accepted norms or equivalencies in higher education.

i. The institution awards degrees and certificates based on student achievement of a program’s stated learning outcomes.

3. The institution requires of all academic and vocational degree programs a component of general education based on a carefully considered philosophy that is clearly stated in its catalog. The institution, relying on the expertise of its faculty, determines the appropriateness of each course for inclusion in the general education curriculum by examining the stated learning outcomes for the course. General education has comprehensive learning outcomes for the students who complete it, including the following:

a. An understanding of the basic content and methodology of the major areas of knowledge: areas include the humanities and fine arts, the natural sciences, and the social sciences.

b. A capability to be a productive individual and life long learner: skills include oral and written communication, information competency, computer literacy, scientific and quantitative reasoning, critical analysis/logical thinking, and the ability to acquire knowledge through a variety of means.

c. A recognition of what it means to be an ethical human being and effective citizen: qualities include an appreciation of ethical principles; civility and interpersonal skills; respect for cultural diversity; historical and aesthetic
sensitivity; and the willingness to assume civic, political, and social responsibilities locally, nationally, and globally.

4. All degree programs include focused study in at least one area of inquiry or in an established interdisciplinary core.

5. Students completing vocational and occupational certificates and degrees demonstrate technical and professional competencies that meet employment and other applicable standards and are prepared for external licensure and certification.

6. The institution assures that students and prospective students receive clear and accurate information about educational courses and programs and transfer policies. The institution 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.

   a. The institution makes available to its students clearly stated transfer-of-credit policies in order to facilitate the mobility of students without penalty. In accepting transfer credits to fulfill degree requirements, the institution certifies that the expected learning outcomes for transferred courses are comparable to the learning outcomes of its own courses. Where patterns of student enrollment between institutions are identified, the institution develops articulation agreements as appropriate to its mission.

   b. When programs are eliminated or program requirements are significantly changed, the institution makes appropriate arrangements so that enrolled students may complete their education in a timely manner with a minimum of disruption...

B. Student Support Services

The institution recruits and admits diverse students who are able to benefit from its programs, consistent with its mission. Student support services address the identified needs of students and enhance a supportive learning environment. The entire student pathway through the institutional experience is characterized by a concern for student access, progress, learning, and success. The institution systematically assesses student support services using student learning outcomes, faculty and staff input, and other appropriate measures in order to improve the effectiveness of these services.

1. The institution assures the quality of student support services and demonstrates that these services, regardless of location or means of delivery, support student learning and enhance achievement of the mission of the institution...
4. The institution evaluates student support services to assure their adequacy in meeting identified student needs. Evaluation of these services provides evidence that they contribute to the achievement of student learning outcomes. The institution uses the results of these evaluations as the basis for improvement.

C. Library and Learning Support Services

Library and other learning support services for students are sufficient to support the institution’s instructional programs and intellectual, aesthetic, and cultural activities in whatever format and wherever they are offered. Such services include library services and collections, tutoring, learning centers, computer laboratories, and learning technology development and training. The institution provides access and training to students so that library and other learning support services may be used effectively and efficiently. The institution systematically assesses these services using student learning outcomes, faculty input, and other appropriate measures in order to improve the effectiveness of the services...

2. The institution evaluates library and other learning support services to assure their adequacy in meeting identified student needs. Evaluation of these services provides evidence that they contribute to the achievement of student learning outcomes. The institution uses the results of these evaluations as the basis for improvement...
Appendix B: Saddleback College Vision, Mission and Values

Our Vision:
Saddleback College will be the first choice of students who seek a dynamic, innovative, and student-centered postsecondary education.

Our Mission:
Saddleback College enriches its students and the south Orange County community by providing a comprehensive array of high-quality courses and programs that foster student learning and success in the attainment of academic degrees and career technical certificates, transfer to four-year institutions, improvement of basic skills, and lifelong learning.

Our Values:
Saddleback College embraces:

- **Commitment**
  We commit to fulfilling our mission to serve the south Orange County community.

- **Excellence**
  We dedicate ourselves to excellence in academics, student support, and community service.

- **Collegiality**
  We foster a climate of integrity, honesty, and respect.

- **Success**
  We place our highest priority on student learning and delivering comprehensive support for student success.

- **Partnership**
  We strive to develop strong and lasting partnerships among students, faculty, staff, and the community.

- **Innovation**
  We anticipate and welcome change by encouraging innovation and creativity.

- **Academic Freedom**
  We endorse academic freedom and the open exchange of ideas.

- **Sustainability**
  We promote environmental sustainability and use our resources responsibly to reduce our ecological impact.

- **Inclusiveness**
  We cultivate equity and diversity by embracing all cultures, ideas, and perspectives.

- **Global Awareness**
  We recognize the importance of global awareness and prepare our students to live and work in an increasingly interconnected world.
# Appendix C: Active Verbs for Writing SLOs

<table>
<thead>
<tr>
<th>Position in Bloom's (1956) Taxonomy</th>
<th>Active Verbs for Writing Student Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge</strong></td>
<td>Arrange, define, describe, duplicate, enumerate, identify, indicate, know, label, list, match, memorize, name, reads, recall, recognize, record, relate, repeat, reproduce, select, state, view, underline</td>
</tr>
<tr>
<td><strong>Comprehension</strong></td>
<td>Classify, cite, convert, defend, describe, discuss, distinguish, estimate, explain, express, generalize, give, examples, identify, indicate, infer, locate, paraphrase, predict, recognize, report, restate, review, rewrite, select, suggest, summarize, tell, trace, translate, understand</td>
</tr>
<tr>
<td><strong>Application</strong></td>
<td>Act, administer, apply, articulate, assess, change, chart, choose, collect, compute, construct, contribute, control, demonstrate, determine, develop, discover, dramatize, employ, establish, extend, give examples, illustrate, implement, include, inform, instruct, interpret, investigate, prepare, preserve, produce, project, provide, relate, report, schedule, ship, show, sketch, solve, teach, transfer, translate, use, utilize, write</td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td>Analyze, appraise, breaks down, calculate, categorize, compare, contrast, correlate, criticize, debate, determine, diagram, differentiate, discriminate, distinguish, examine, experiment, focus, identify, illustrate, infer, inspect, inventory, limit, outline, point out, prioritize, question, recognize, relate, select, separate, subdivide, solve, test</td>
</tr>
<tr>
<td><strong>Synthesis</strong></td>
<td>Adapt, anticipate, arrange, assemble, categorize, collaborate, collect, combine, communicate, compile, compose, construct, create, design, devise, develop, explain, express, facilitate, formulate, generate, incorporate, individualize, initiate, integrate, intervene, manage, model, modify, negotiate, organize, perform, plan, prepare, produce, propose, rearrange, reconstruct, reinforce, relate, reorganize, revise, set up, structure, substitute, validate, write</td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td>Appraise, argue, assess, attach, choose, compare, conclude, contrast, criticize, critique, decide, defend, enumerate, estimate, evaluate, grade, interpret, judge, justify, measure, predict, rate, reframe, revise, score, select, support, value</td>
</tr>
</tbody>
</table>
Appendix D: Additional Resources


- Student Learning Outcomes in the CSU System. http://www.calstate.edu/AcadAff/SLOA/

- Assessing Student Learning in the Community Colleges from Bakersfield College. http://online.bakersfieldcollege.edu/courseassessment/

- North Carolina State University – A very comprehensive site on different aspects of SLOs and assessment. Includes links to the many college assessment sites. http://www2.acs.ncsu.edu/UPA/assmt/resource.htm


- Authentic Assessment Toolbox http://jonathan.mueller.faculty.noctrl.edu/toolbox/

- Scantron Support from CSU Fullerton http://fdc.fullerton.edu/technology/scantron/

- Using Scoring Rubrics from CSU http://www.calstate.edu/AcadAff/SLOA/links/using_rubrics.shtm

- Sample Rubrics http://www.winona.edu/air/rubrics.htm