

STUDENT LEARNING OUTCOMES AND ASSESSMENT FACULTY HANDBOOK



DEVELOPED BY THE
STUDENT LEARNING OUTCOMES
AND ASSESSMENT COMMITTEE (SLOAC)
OF MIRACOSTA COLLEGE

2015

<http://www.miracosta.edu/instruction/slo/index.html>

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INTRODUCTION

It is the philosophy of the MiraCosta College community that the adoption of a learner-centered curriculum succeeds only if everyone participates, speaking within and across disciplines, at every stage and in an ongoing manner to create a meaningful, manageable and sustainable assessment process. Incorporating outcomes and assessment across the instructional platform must be a faculty-designed, learning-centered enterprise. Student Learning Outcomes (SLO) assessment and evaluation play a key role in informed decision-making in program development and resource allocation.

STUDENT LEARNING OUTCOMES & ASSESSMENT COMMITTEE (SLOAC)

Mission Statement:

In order to advance the mission of MiraCosta College, the Student Learning Outcomes and Assessment Committee (SLOAC) advocates for consistent and meaningful student learning assessment by supporting and guiding the faculty as they creatively, collaboratively, and conscientiously develop, implement, and evaluate their SLOs and assessments. (Adopted by SLOAC in March 2012).

About the Committee: Membership, Functions and History:

The SLOAC is a senate advisory committee composed of faculty members from various disciplines within the areas of credit general education (GE), career and technical education (CTE), and non-credit (NC). One Associate Faculty representative sits on the committee. Deans representing both CTE and GE areas are ex-officio members, and the Dean of the Office of Institutional Effectiveness acts as a resource to the committee.

The function of the committee is to assist and provide direction to faculty in the development and assessment of SLOs at the various levels from course to program to institution. It also documents new and refined/revised SLOs for courses and programs. Under the direction of the SLO Coordinator (who also serves as the committee chair) and with support from the administrative assistant assigned by the Office of Instruction, the committee oversees all aspects of the SLO process, including but not limited to Course and Program SLO (CSLO and PSLO, respectively) approval, SLO training and support, and updating the TracDat database which is the main repository for all course and program SLO assessment data/evidence. Evidence of actions based on recommendations is incorporated into annual Program Review reports which are stored in the portal. (<https://portal.miracosta.edu/>)

The college faculty began the SLO development process in 2007 by establishing General Education (GE) and Career & Technology Education (CTE) program outcomes. This led to the development of Assessment Documentation Matrices (ADMs) which rate the program outcomes importance in

each of the courses offered in the degree or certificate of achievement. These matrices provided guidance to the faculty in the development of specific course SLOs. The faculty then reviewed the ADMs once again by looking at all the program core course ratings related to the program outcomes. Discussion among all departments that contributed courses to a degree or certificate led to the development of the Program SLOs. The Program SLOs link to the Institutional Learning Outcomes which map to the College Mission. The college then incorporated the use of documents named Mastery Matrices that relate these outcomes at the program level (for GE and CTE) and the institutional level (all academic areas) to all courses.

Effective June 2009, the work of the original Outcomes Assessment Committee (OAC) was integrated within our new Governance Model, with associated responsibilities for the SLO processes shared across key college governance committees. The SLO assessment process became integrated into the culture of the college. The OAC was disbanded and coordination of the SLO assessment process was maintained and advanced by a new SLO Coordinator. Administrative support was provided by the Office of Instruction. All faculty participated in the ongoing process of assessment with training opportunities offered through flex workshops and in consultations with the SLO Coordinator. In 2011, the committee was re-established as the Student Learning Outcomes & Assessment Committee (SLOAC) as an ad hoc senate advisory committee, led by a new SLO Coordinator. It became a permanent senate advisory committee in the 2012-2013 academic year.

ABOUT SLOs – a Q&A Primer for SLO Assessment

1. What are SLOs?

Student learning outcomes (SLOs) are the specific observable or measurable results that are expected subsequent to a learning experience. These outcomes may involve knowledge (cognitive), skills (behavioral), or attitudes (affective) that provide evidence that learning has occurred as a result of a specified course, program activity, or process. A SLO refers to an overarching outcome for a course, program, degree or certificate, or student/learning services area (such as the library). SLOs describe a student's proficiency at integrating many discrete skills using higher level thinking abilities and to produce something that asks them to apply what they've learned. A SLO usually encompasses a gathering together of smaller discrete objectives through analysis, evaluation and synthesis into more sophisticated skills and abilities.

While course grades are holistic measures of multiple skills, they provide feedback to the student on their overall performance but do not pinpoint which skills still need improvement. SLOs are developed and designed by college faculty and staff to measure those skills which they deem to be most important for further success in academia and in life. [Reference the following whitepaper of the Academic Senate of California Community

Colleges (ASCCC) for more information: <http://www.asccc.org/content/sharing-student-learning-outcomes-slos-your-college-community>.]

2. Why do we need SLOs?

Evaluation of SLO assessments provide instructors with information on specific, important abilities of their students in specific courses and programs. While grading is a method of assessment, student learning outcomes provide specific evidence of the areas of knowledge and abilities in which students are successful or deficient. Documentation of the development, assessment and evaluation of course, program and institutional SLOs is also required for the purposes of accreditation by the Accrediting Commission for Community and Junior Colleges (ACCJC).

3. What is the benefit of SLOs?

Since SLOs assess student abilities, evaluation provides the instructor, department, program, and/or institution with information on what skills students have achieved and ones in which they are deficient. These data empower faculty to review and revise curriculum, pedagogy and student support strategies to provide greater opportunities to students to be successful upon course, program, or degree completion.

4. What are the levels of SLO assessment at MCC?

- a. **Course SLO assessments** are developed and evaluated in a collaborative effort by instructors teaching a specific course. The instructors are the experts in terms of information on the needs of the students, instruction, skill development, and practical application of concepts learned. The course SLOs are vetted and established by the department; a current list of all course SLOs is maintained on the SLOAC website (https://www.miracosta.edu/instruction/slo/downloads/Credit_CSLOs_2014-2015.pdf). Conclusions based upon assessment evaluation data leads to constant and consistent improvement of curricula, pedagogical skills, and student services that assist in achieving those outcomes in the course. The SLOs are developed and assessed by discipline experts in each department. They emphasize student abilities gained through learning and applying the course objectives. Assessment tools should allow students to demonstrate higher level thinking, as appropriate to that course. The following link provides useful information relating to vocabulary and question phrasing which is useful for SLO wording and the framing of SLO assessment items: <http://www.bloomstaxonomy.org/Blooms%20Taxonomy%20questions.pdf>.

b. Program SLOs (PSLOs)

The purpose of program/certificate-level assessment is threefold: (1) to identify where students' performance on program/certificate outcomes needs to be improved, (2) to identify courses that could be modified to improve that performance, and (3) to provide evidence of programs/certificates that are performing well and can be used as models/exemplars. PSLO assessments are developed in a collaborative effort by the faculty of departments whose courses contribute to the core of a degree or certificate of achievement. Assessments administered at the course level may be employed as long as there is departmental dialogue regarding how the course level assessment contributes to the program outcome in terms of student success. **Competency at the course level does not imply competency at the program level.** Therefore, course mapping, which consists of using CSLO proficiency data (percent of students meeting benchmark) from core courses in a program is not a reliable measure for making conclusions regarding program-level proficiency. Furthermore, the method is considered unacceptable by the Accreditation Commission of California Community and Junior Colleges (ACCJC). If course mapping was previously used to assess PSLOs, departments should engage in dialogue regarding how the CSLO assessment items, that were used, inform decisions about program growth and needs. Program specific assessment tools should provide a framework for students to demonstrate higher order thinking at the program level. For example, a portfolio of work completed in a program or an assessment in a capstone course enables students to demonstrate breadth of knowledge and expertise as a result of a series of related courses.

CTE programs may develop SLOs based on standards set by governing agencies. Some GE departments (transfer agreements) are developing course program SLOs based on articulation agreements.

- c. The **Institutional SLOs (ILOs)** are common goals of all students who engage in an educational program. They were developed by the entire college faculty and approved by the Board of Trustees. Assessment of the ISLOs, which in several areas overlap the GE/CTE outcomes will be performed on a broader scale than program SLO assessment by conducting a systematic review of the success of students across disciplines. The method of assessing ILOs was proposed by faculty at a college-wide assessment day activity and fully developed by a task force of faculty and SLOAC members in 2014. Each student is evaluated using exam item(s), pre- and post-tests, class projects or other suitable instruments by his/her instructor during the semester and an achievement score is entered into the SURF grade roster online. This method facilitates disaggregation and analysis of data by key student demographic classification. **MiraCosta College has five**

Institutional Learning Outcomes, each with a subset of core competencies:

i. Effective Communication

- Write, speak, read, listen, and otherwise communicate
- Communicate clearly, accurately, and logically
- Communicate appropriately for the context

ii. Critical Thinking & Problem Solving

- Define and analyze problems clearly
- Think independently, creatively, logically, and effectively
- Apply appropriate problem solving methods
- Analyze and synthesize information from multiple perspectives

iii. Professional & Ethical Behavior

- Demonstrate responsible and professional conduct, in the classroom, workplace, and community
- Demonstrate the ability to work independently and collaboratively

iv. Information Literacy

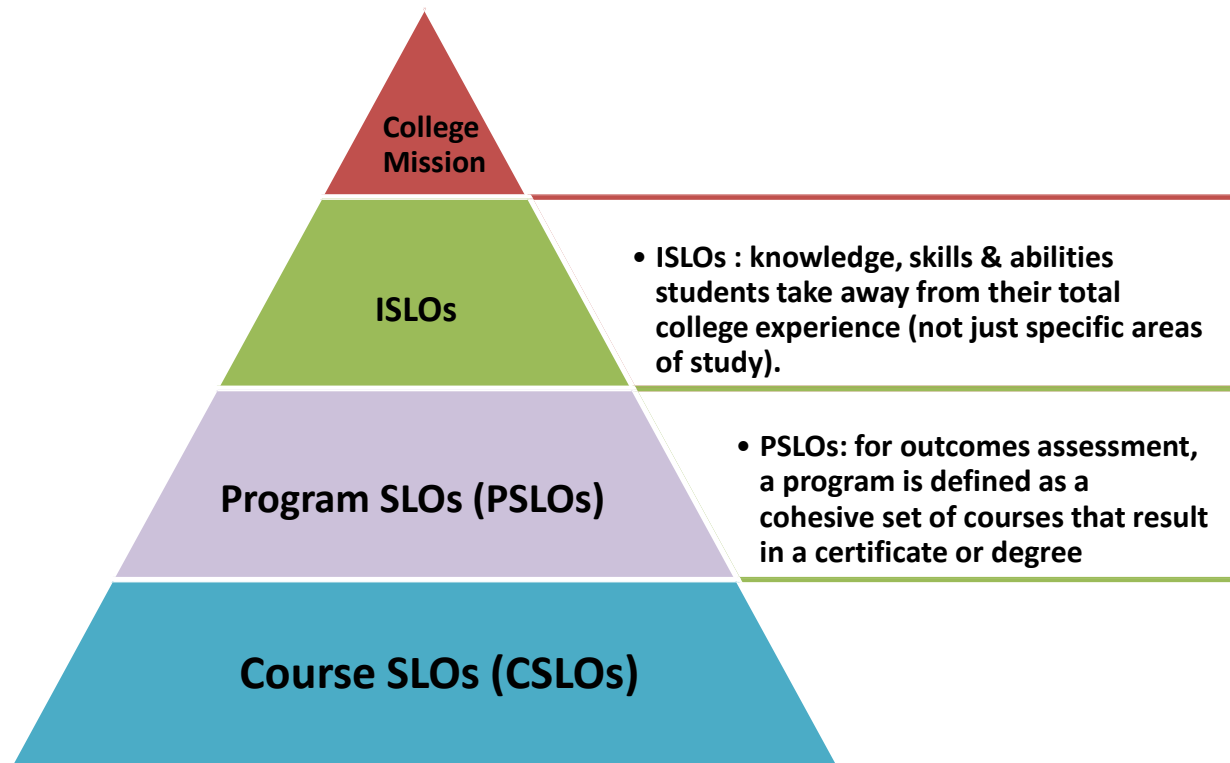
- Identify information needed
- Collect information effectively and efficiently
- Evaluate and analyze information
- Use and apply information accurately and appropriately

v. Global Awareness

- Demonstrate respect for diversity and multiple perspectives
- Value his/her place and role in an increasingly interconnected global community
- Demonstrate cultural and environmental awareness

The diagram below shows how learning outcomes at all levels correspond to and support the College Mission.

Course SLOs are most numerous and are the foundation upon which the various Program SLOs are built; both contribute to and reinforce the Institutional Student Learning Outcomes which support the mission of the College.



5. How do course SLOs relate to Program SLOs and to Institutional SLOs?

The relationship between course SLOs, program, and institutional SLOs is identified through the Mastery Matrix [formerly disaggregated as Assessment Documentation Matrices (ADM)s] which rates the importance or relevance of each course in relation to the program (GE &/or CTE) and institutional SLO on a scale of 1-5 (with 5 indicating most important or relevant). Each instructional department is responsible for completing and updating the Mastery Matrix ratings for each of its courses. Mastery Matrix ratings for each course are located in the SLOAC folder on the College's network sharedrive, which is accessible to all administrators and full-time faculty (sharedrive_oc\\sf.usa.miracosta.cc.ca.us). The matrices are also available for public view on the SLOAC website. A brief sample of how faculty have rated some of their courses SLOs in relation to the ISLOs is shown below.

IL Outcome Matrix					
2014-2015					
COURSE NUMBER	Effective Communication	Critical Thinking & Problem Solving	Professional & Ethical Behavior	Information Literacy	Global Awareness
ACCT 101	2	3	2	3	1
ADM 100	5	4	3	3	4
ANTH 101	3	5	1	2	3
BIO 230	4	5	2	3	2
BOT 110	5	4	5	5	2

The implementation of mastery matrices created a more streamlined and informative approach for assessment and the ability to make informed decisions from assessment results as the ISLOs all relate to the MCC mission and its strategic plan. The mastery matrices are reviewed annually by all instructional departments and updated as new courses are added or courses are sunsetted.

6. What are types of assessment methods and tools?

- a. Formative vs. Summative
 - i. Formative assessments take place throughout a semester to determine progress toward designated achievement levels of currently-enrolled students;

- ii. Summative assessments take place at the end of a semester and upon evaluation of the assessment data will theoretically benefit students enrolled in subsequent semesters;
- b. Direct vs. Indirect
 - i. Direct measures of assessment require students to represent, produce or demonstrate their learning. These may be embedded into the curriculum and contribute to the student's grade;
 - ii. Indirect measures of assessment capture information about students' perceptions about their learning experiences and attitudes towards the learning process;
- c. Objective vs. Performance
 - i. Objective assessments only allow for one correct answer;
 - ii. Performance assessments are better at measuring higher-order thinking as they may be answered in multiple ways allowing for more than one correct answer;
- d. Embedded vs. Add-on
 - i. Embedded assessments are tasks that are integrated into part of the course and contribute to the student's grade;
 - ii. Add-on assessments go beyond the course requirements and usually don't contribute to the student's grade in a course.

NOTE: Due to the fact that students may lack incentive to respond optimally to "add-on" assessments, MCC faculty should develop and adopt embedded assessments.

Regardless of the method of assessment, SLO assessments should be designed by the faculty discipline experts.

Examples of Assessment Tools that may be applicable at the Course or Program Level:

- Student work samples
- Embedded assessment (where test questions or skill performance assessment of the learning outcome is embedded in regular course exams)
- Observation of student behavior (based on class discussions, presentations, group work, etc.)
- Juried review of student projects
- Evaluations of performance
- Performance on a case study/problem
- Performance on a problem analysis (student explains how he/she solved the problem)
- National licensure exams
- Locally developed tests and quizzes
- Diagnostic tests
- Standardized tests

- Pre-and post-tests
- Blindly scored essay tests
- Videotapes of performance (especially useful in areas such as drama or music performance)
- Essay examinations
- Standardized and certification exams (in some disciplines, national standardized or certification exams exist that might be useful)
- Students' self-assessment during the course and/or End-of-semester interviews or surveys
- Internship evaluations
- Secondary analyses of course papers (a second reading done by other than the instructor or by others along with the instructor)
- Secondary analyses of course projects (products other than papers, e.g., oral presentations to which other faculty and even area professionals can be invited to serve as outside evaluators)
- Capstone courses (the capstone course is the place where students are most likely to exhibit their cumulative understanding and competence in the discipline)
- Student portfolios (provides a much richer and well-rounded view of student learning than single documents can provide and they can be valuable for programmatic assessment, but the amount of data can be overwhelming and specific ways to view them need to be developed)

7. How do I evaluate SLO assessments?

Assessment evaluation data may be qualitative or quantitative. Individual departments develop SLOs and their assessment tools, and choose appropriate methods of evaluating these assessment tools. If you have any questions, contact the department chair and/or the department SLO lead. Grading rubrics are beneficial. Rubrics are tools for scoring student work or performances, typically in the form of a table or matrix, with criteria that describe the dimensions of the outcome down the left-hand vertical axis, and levels of performance across the horizontal axis. The work or performance may be given an overall score (holistic scoring), or criteria may be scored individually (analytic scoring). Rubrics are also used to communicate expectations to students." http://www.wascsenior.org/lexicon/14#letter_r .

Information on developing appropriate rubrics may be found at a number of sites such as [http://assessment.uconn.edu/docs/How to Create Rubrics.pdf](http://assessment.uconn.edu/docs/How_to_Create_Rubrics.pdf), <http://provost.rpi.edu/learning-assessment/assessment/building-and-using-rubrics> , [http://cdn2.hubspot.net/hub/254524/file-461027415-pdf/RubricDesign LanceTomei.pdf](http://cdn2.hubspot.net/hub/254524/file-461027415-pdf/RubricDesign_LanceTomei.pdf) . Sample rubrics for evaluation of assessments may be found through internet searches at various colleges and educational organizations (e.g. <http://wasc.fresno.edu/rubrics>).

When you develop your rubric for evaluating a specific outcome assessment, how do you judge the quality of YOUR rubric? Take a look at the following website:

http://www.ucdenver.edu/faculty_staff/faculty/center-for-faculty-development/Documents/Tutorials/Rubrics/4_quality/5_rubric_rubric.htm .

The following rubric was presented by Dr. Lance Tomei on a Live Text webinar held October 16, 2014.

"META-RUBRIC" TO EVALUATE RUBRIC QUALITY

Criteria	Unsatisfactory	Developing	Mastery
Rubric alignment to assignment.	The rubric includes multiple criteria that are not explicitly or implicitly reflected in the assignment directions for the learning activity to be assessed.	The rubric includes one criterion that is not explicitly or implicitly reflected in the assignment directions for the learning activity to be assessed.	The rubric criteria accurately match the performance criteria reflected in the assignment directions for the learning activity to be assessed.
Comprehensiveness of Criteria	More than one critical indicator for the competency or standard being assessed is not reflected in the rubric.	One critical indicator for the competency or standard being assessed is not reflected in the rubric.	All critical indicators for the competency or standard being assessed are reflected in the rubric.
Integrity of Criteria	More than one criterion contains multiple, independent constructs (similar to "double-barreled survey question").	One criterion contains multiple, independent constructs. All other criteria each consist of a single construct.	Each criterion consists of a single construct.
Quality of Performance Descriptors	Performance descriptors are not distinct (i.e., mutually exclusive) AND collectively do not include all possible learning outcomes.	Performance descriptors are not distinct (i.e., mutually exclusive) OR collectively do not include all possible learning outcomes.	Performance descriptors are distinct (mutually exclusive) AND collectively include all possible learning outcomes.

8. How often do I assess SLOs?

A dynamic SLO assessment process is necessary in order to promote student learning and success. It is good professional practice to assess more frequently than once during the 6-year calendar schedule that was originally established by the Academic Senate of MiraCosta College when the process began. This means that for all courses there would be an initial assessment (open the loop), an action plan to improve performance (if needed), and a follow-up assessment (closing the loop) within the cycle to determine the success of the plan.

Even if minimum achievement levels are met in your course, unless 100% of the students meet competency, there is room for improvement. Action plans may be developed, especially if a data analysis is done on the success rate of each SLO. Formative assessments (assessment during the early/mid-semester) provide information on needs of current students and can be performed multiple times during the semester. Summative assessments provide information on student achievement at the end of the course and provide information to the instructor that will benefit future students if action plans are made and subsequently implemented. Frequent assessment of course SLOs, and documented departmental dialogue relating to SLO assessment results provide evidence that we are closing the loop, as described in the diagram below. SLOAC recommends that CSLO assessment takes place at least twice per cycle

9. What does “closing the loop” mean in terms of SLO Assessment?

Closing the loop refers to the use of assessment results to improve student learning through collegial dialogue informed by the results of student service or instructional 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. Closing the loop applies to all levels of SLO assessment.



10. What evidence is needed to demonstrate that SLO assessment is an ongoing process? And how is TracDat used to document that evidence?

- a. Maintaining up-to-date records in the TracDat repository by faculty demonstrates that the SLOs are being assessed, data evaluated, and action plans implemented as appropriate. An instructional guide for the use of TracDat is found online at https://www.miracosta.edu/instruction/slo/downloads/TracDat_User_Manual.pdf. All full-time faculty have access to entering data into TracDat. A comprehensive, Microsoft Word table for recording data was developed by SLOAC and may be used by any faculty member prior to entering them into TracDat. (Appendix 1)
- b. Record-keeping in the additional forms of agendas and minutes from meetings in which SLO assessment is discussed provides further evidence. These documents may also be stored in TracDat as “related documents” recording departmental dialogue. Document all SLO-related discussions and outcomes of meetings.
- c. When writing the annual program review, summarize the following information on CSLO and PSLO information and results, actions, and needs via program review SLO reflection area. The following information is required in the program review report in the Program Learning Outcomes Reflect Area:

Were Student Learning Outcome Assessment Cycles (SLO ACs) conducted as specified in the timeline? How have the results of completed SLO ACs been used to provide continuous improvement to the operation of the program? (i.e. were any action plans developed based on Course SLO &/or Program SLO assessment data?) What progress was made with respect to any action plans implemented in prior years that were directed towards improving student success? If resources were provided to implement an action plan, how were they utilized and relate any follow-up SLO assessment data? Have student learning outcomes (SLOs) been written for this program and included in all course syllabi? Are the discipline and program SLOs still relevant? Were any Course or Program SLO revised/deleted in the past year based on assessment evaluations or revision of the Course Outline of Record?

https://www.miracosta.edu/governance/iprc/downloads/Handbook_v4.pdf

11. How may we improve student success with respect to student learning outcomes assessment?

Even if minimum achievement levels are met, unless 100% of the students attain proficiency, there is room for improvement. Instructors often question whether or not a new lesson can be refined to reach more students. An action plan designed in collaboration with all faculty involved in the specific SLO(s) can be developed to target areas in which students were not successful. The action plan should be developed based on the evaluation of specific data collected during the evaluation process of the

SLO assessment, along with dialogue within the department to ascertain whether a certain population (such as ESL students) was less successful. Action plans may be in the form of providing additional learning experiences (practice) for the students, refining the curriculum, revising the SLO and/or semantics of the SLO prompts in an assessment. They may also require additional resources to provide support for the students. Resources may take the form of personnel, equipment, time and talent, additional/different facilities, etc. Once an action plan is devised, it should be implemented as soon as possible. If budgetary resources are required to implement the action plan, then it may be necessary to request funding through the Program Review process.

Consider the following types of action plans that may be implemented and the follow-up with a re-assessment that may assist you in demonstrating that the action plan directly or indirectly assisted students in achieving the outcome:

- State goals or objectives of assignment/activity more explicitly
- Revise content of assignment/activities
- Revise the amount of writing/oral/visual/clinical or similar work
- Revise activities leading up to and/or supporting assignment/activities
- Increase in-class discussions and activities
- Increase student collaboration and/or peer review
- Provide more frequent or more comprehensive feedback on student progress
- Increase guidance for students as they work on assignments
- Use methods of questioning that encourage the competency you measured
- Provide more opportunities for students to practice assignments that relate to a specific outcome
- State criteria for grading more explicitly
- As an instructor, increase your interaction with students outside of class
- Ask a colleague to critique assignments/activities
- Mentoring of associate faculty
- Increase tutoring opportunities for students
- Collect more data
- Other

12. How does SLO assessment factor into Institutional Program Review and resource allocation?

- a. Frequent course and program SLO assessment provide information that informs our annual Institutional Program Review. Evaluation of SLOs provides the information that leads to decision-making regarding resource allocations that are needed by departments in order to promote student success and retention. Departments review, reflect on, and plan for future student success in their Program Review documents. Resources are requested and ranked by division heads and forwarded to the Budget and Planning

Committee (BPC) annually. SLO assessment evidence factors strongly into budgetary recommendations made by the BPC.

- b. Instructional departments may want to collaborate with student learning support services on common action plans to improve student learning. Linking course and program SLO assessment with specific student services (counseling, retention services, etc.) promotes student success.

13. How do we ensure that our students are aware of SLOs and their purpose?

- a. Course SLOs must be included in course syllabi. It is even beneficial to indicate in the syllabi the types of assignments that will be assessed so students become more aware of those SLOs.
- b. Discuss the distinction between course objectives and course outcomes with students to increase awareness.
- c. Course, Program, and Institutional SLOs are published on the MCC SLO website.
- d. Course and Program SLOs may be found in the Course Outlines of Record.
- e. Program outcomes are stated in the college catalog for each degree and certificate.
- f. If and when implementing the SURF ISLO grade roster assessment in a course, SLOAC recommends that the ISLOs to be assessed be included in course syllabus and the process of assessment be discussed with the students.

14. What is institutional dialogue with respect to SLOs?

- a. SLO meetings among faculty within departments, among departments, and college-wide provide an ongoing dialogue. This is especially helpful for understanding how students are succeeding in their programs of study. Departments may use the document in **Appendix 2** to assist them in determining and ranking action plans.
- b. College-wide assessment day activities are provided annually. Discussions are recorded and reported to the college community to inform institutional planning and decision-making.
- c. The SLO website provides samples of dialogue and useful information for faculty, students and the college community.

15. How will faculty be evaluated on their participation in SLO development and assessment?

Faculty members are not evaluated on the degree of SLO assessment success. **Rather, all faculty are currently required to participate in the development and assessment of course and program SLOs and mapping them to the ILOs and college mission.** Refer to the Professional Growth and Evaluation handbook (Criteria for Evaluation: Full time faculty:

<https://www.miracosta.edu/instruction/pge/downloads/TenureCandidateHandbookAugust2015.pdf> & Associate faculty : https://www.miracosta.edu/instruction/downloads/2014-17contractFINAL_000.pdf) and ACCJC standard III.A.6 (Appendix 3). Summaries of ACCJC standards are also found in Appendix 4.

It is important to demonstrate that action plans have been thoughtfully developed in order to improve student success as necessary.

Developing, Assessing, and Evaluating Course SLOs

SLO assessment consists of a six step process in order to close the loop:

1. Development : Pinpoint the most important abilities that should be achieved by your students in a course or program. Define what students should be able to do, think, or know. Then develop the SLO(s).
2. Meeting standards set: Determine whether, and to what extent, students can perform, think, or produce these SLOs.
3. Evaluation of results: Develop a rubric or grading scale that articulates in words how you grade that assignment. If you only use exams, identify groups of specific questions on one of your major exams that you feel address the competency. It will be most helpful if there are several questions.
4. Create action plans: Use the data to propose methods by which students will be able to improve and meet the standard.
5. Implement action plan for improvement.
6. Re-assess.

Training resources for developing, assessing, and evaluating course SLOs are available at the college's SLO website: <http://www.miracosta.edu/instruction/slo/trainingandresearch.html>.

When writing SLOs:

- **Focus on what the student can do.** Don't address what was taught or presented, but address the observable outcome you expect to see in the student.
- **Use active verbs.** Active verbs are easier to measure.
- **Include an assessable expectation.** It helps if you have clearly defined expectations concerning the criteria related to that outcome. In the above example, some of the criteria related to using the microscope would include:
 - a clearly focused image
 - correct lighting adjustment of the diaphragm and condenser

- appropriate magnification for the object
- an evenly distributed specimen field
- clearly located object identified by the pointer
- a written identification
- **Share the outcomes with faculty from other disciplines and within your own discipline.** This helps focus the meaning of the statements. For instance in the above criteria the faculty may ask for clarification of "appropriate magnification."
- **Share the outcomes with your students.** Students need to clearly understand what is expected, they are unfamiliar with the discipline specific language. This helps focus the clarity of the statements.
- **Modify as you learn from experience.** Continuously reevaluate, modify and refine course SLOs based on what is learned through the evaluation process.

For example, a math assessment item which requires a student to create a model, perform the relevant operations, and arrive at a conclusion about the validity of the model attains Level VI in Blooms Taxonomy, whereas an item which merely has the student identify an operation only attains Level I.

Additionally, the SLOAC has found the information at the following website to be very useful:
http://www.craftonhills.edu/Faculty_and_Staff/SLOs/Define_and_Refine.aspx.

Developing, Assessing, and Evaluating Program SLOs

The educational objectives of students at community colleges tend to vary more than those of students enrolled at 4-year institutions. According to the American Association of Community Colleges (2009) students come to community college:

- to enroll in a single course to upgrade a job skill,
- for personal enrichment,
- to take various courses for a promotion,
- to earn an AA/AS degree or certificate,
- to complete a series of courses needed in order to transfer to a 4-year institution.

Therefore, community college students may not complete a “program” or logical sequence of courses in an area of study. As faculty members and administrators at the community college level, we have a challenging task in terms of assessing Program Student Learning Outcomes (PSLOs), and authorities on outcomes assessment acknowledge that program-level assessment is difficult to complete at the community colleges.

In order to develop Program SLOs, a bit of introduction is necessary. We need to understand why program-level assessment is necessary and what it actually entails. Program-level assessment enables us to “determine whether students can integrate learning from individual courses into a coherent whole” (Palomba and Banta, 1999). First off, there are several definitions to a “program” at the community college.

MiraCosta College Program definition for purposes of outcomes assessment:

MCC utilizes the Title 5 §55000(g) definition which states that a “Program” is defined as a cohesive set of courses that result in a certificate or degree (ASCC, 2010).

Please note that in MCC Institutional Program Review, programs may:

- 1. include courses in a specific discipline.*
- 2. refer to student service programs and administrative units.*
- 3. be made up of “pre-collegiate or remedial courses, particularly in English or mathematics” (Bers, n.d.). This could also include such course sequences as our Allied Health track in Biology.*
- 4. Refer to special programs, such as Honors programs, Service Learning programs, and types of grant-funded programs for students (Bers, n.d.).*

Where does your department place?

If your department offers a degree or certificate, you will create and assess a PSLO, enter the results into TracDat, and reflect upon these results in program review. If your department does not offer a degree or certificate, you have the opportunity to reflect on the Liberal Arts PSLO assessment results in the appropriate area of emphasis as relates to your specific discipline courses in program review. Program review also provides the opportunity to reflect on course level SLOs. In summary, all departments reflect upon PSLO assessment results in program review; only departments that offer degrees and/or certificates create and assess a PSLO, and enter the results into TracDat.

How do I write the PSLOs for my program? And how do I assess them?

Various methods of assessment have been developed to meet the challenging goal of effectively assessing program level outcomes. (Bers, n.d.; Nunley, et al., 2011).

It is generally preferable to obtain data from a direct assessment of an outcome over an indirect assessment (e.g. surveys of the students). However, sometimes we must rely on data obtained from surveys if a direct method of assessment is not possible. It is up to each program to determine which method may work best for them. If any of the following suggestions do not suit your needs, be creative and develop your own method. Consult SLOAC for assistance if in need.

When developing your assessments for PSLOs, it is strongly recommended that you review the ISLO Mastery Matrix. Direct your PSLO(s) toward assessing those Institutional SLOs that you rated as highly important (with scores 4's and 5's). The final, completed mastery matrix may be accessed in the SLOAC folder on the MiraCosta College network sharedrive:

When deciding upon an assessment method, keep in mind that direct assessment provides greater evidence of learning and application of knowledge than indirect methods of assessment. SLOAC recommends that some form of direct assessment method and prompt be included when creating the Program SLO. Information gained through both direct and indirect methods of assessment may guide changes in the classroom learning environments. It provides us with opportunities for (1) assessment of student success and (2) accountability to the community and to accrediting agencies. Our major goal should be to use the information to achieve excellence in teaching our students to attain stated learning outcomes.

Finally, relating Program SLOs to Institutional Learning Outcomes (ILOs) connects all outcomes to the College Mission. This is important and should be kept in mind when developing PSLOs.

Course mapping, which consists of using CSLO results to imply PSLO results, is no longer considered to be a valid assessment method by the ACCJC. You may use course level assessment items as long as there is dialogue, in addition to course level dialogue, in which faculty discuss how the results inform the program.

The chart below identifies common PSLO assessments and lists the advantages and disadvantages of each type of assessment.

PSLO ASSESSMENT METHODS

Method	Pros	Cons	College That Uses It
Imbedded questions on final exams.	No extra work for students and faculty; high stakes for students so they perform well.	Faculty must agree on key questions included in the finals.	Bakersfield
Major Assignments:	No extra work for students	Must be meaningful assessment of	Cabrillo

Method	Pros	Cons	College That Uses It
papers, performances, portfolio graded by individual instructors.	and faculty; high stakes for students so they perform well.	major skills synthesized over a series of courses.	
Major Assignments gathered from courses across the college and graded by a common rubric.	No extra work for students and, because they are high stakes assignments, students perform well.	Extra work for faculty to create the rubric, then norm and grade the assignments.	Los Medanos and numerous others
Capstone course.	Sometimes highest level course in degree or certificate is used as capstone; high stakes for students so they try to perform well.	Can be extra units for college or additional requirements for students if it's a new course.	Mira Costa Dance Department
Pre and Post testing.	Can be easy to create and evaluate.	How do you get beginning students to take the pretest? How do you ensure that students are taking the test seriously and try to perform well?	Chaffey College
Capstone project	Can be extra work for students and faculty if not embedded in a course.	If not embedded in a course, it requires additional work to score it beyond classroom; what if a student passes classes but not portfolio or vice versa?	
Program Portfolio, often used in CTE programs or in English for basic skills composition.	In CTE programs, creates something that students can use to show potential employers later; in composition programs, it can be used to accelerate excellent students into higher levels	Additional work to score it beyond classroom; what if a students passes classes but not portfolio or vice versa?	Cabrillo Culinary Arts program; Numerous English composition programs
Board exams or	Easy and provides a real	May not provide enough data to see	Cabrillo

Method	Pros	Cons	College That Uses It
Industry certifications.	world application.	how to improve specific parts of the program.	Nursing Program
Rolling up data from course SLO assessment.	Easy for faculty – less work IF data is meaningful assessment of major skills synthesized over a series of courses and/or measures highest level skills needed to meet SLO.	Data MUST be recorded separately and also discussed separately from course assessment; not sure if ACCJC will continue to allow this. Have to make a good argument for why you are using this method.	Skyline, Grossmont
Focus Groups.	Can get detailed information about student experiences.	Not direct assessment of student work; can't be done alone without another method.	
Exit Survey.	Can get information about student experiences.	Not direct assessment of student work; can't be done alone without another method.	
Successful degree completion.	Easy.	Demonstrates achievement but doesn't actually measure student learning because grades aren't just based on SLO achievement; doesn't give data on how specific parts of the program can be improved.	Chaffey nursing program

Key Questions to ask when selecting a PSLO Assessment Method:

- 1) Which ones will offer authentic and meaningful data about the PSLOs?
- 2) Which assessment method will make it easy to “disaggregate data by subpopulations”?

Submitting SLOs for Approval: New Course, Modifications, and Deleting SLOs

When submitting SLOs for a new course that you are developing, modifying existing SLOs or deleting SLOs, you should use the forms that are found online in the Portal. You must log into the Portal, locate the Committees menu and select SLOAC. Alternatively, the forms may be accessed through the SLOAC website (<https://www.miracosta.edu/instruction/slo/slo.html> - in the Forms menu). Complete the appropriate form and it will be submitted directly through a workflow process, moving to the Department Chair, then on to SLOAC for approval. Please keep in mind that active verbs from Bloom's taxonomy should be used. Use verbs that are appropriate for the level & rigor of the course.

Changes to SLOs may take place anytime during the year. Once approved by SLOAC, they may be instituted in the following semester. If you are deleting a CSLO or PSLO, the previous SLO will be archived. All data from previous SLO assessments will be retained in TracDat.

Works Cited:

Academic Senate for California Community Colleges (ASCCC). 2010. SLO Terminology Glossary - A Resource for Local Senates. Retrieved from <http://asccc.org/papers/slo-terminology-glossary-resource-local-senates> .

Academic Senate for California Community Colleges (ASCCC). 2010. Guiding Principles for SLO Assessment. <http://asccc.org/sites/default/files/SLO-paper-Fall2010.pdf> .

American Association of Community Colleges. (2009). *Principles and plans: A voluntary framework of accountability (VFA) for community colleges*. Washington, DC: Author. Retrieved from http://www.aacc.nche.edu/About/Governance/Documents/vfa_1208.pdf.

Bers, T. Assessment at the Program level. (n.d.) Retrieved from <http://www.lanecc.edu/assessment/documents/ProgLevelAssessmentbyBers.pdf>.

Nunley, C., Bers, T. , & Manning, T. 2011. Learning Outcomes Assessment in Community Colleges. Retrieved from <http://www.learningoutcomeassessment.org/documents/CommunityCollege.pdf> .

Palomba, C.A. & Banta T.W. 1999. *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*. San Francisco: Jossey-Bass.

APPENDIX 1. Comprehensive Table For Recording CSLO Assessment Data

You may want to enter data and reflections into all or parts of this grid prior to entering SLO Assessment data online into TracDat. This, more comprehensive document, may then be stored in TracDat in the “Related Documents” folder on the “Add Process “ (Results) window, for future reference. *(page breaks intentionally omitted in this template) (updated 9/21/15)*

Today's date:	Your name:
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This column indicates into which FIELD IN TRACDAT the data should be entered.	COURSE NUMBER:→ <i>(complete the box to the right with course number)</i>			
	Number of SLO Assessed	#1	#2	#3
This field is already filled in	Assessment Method			
" " " " " "	Expected Level of Achievement			
Semester & week assessed (a dropdown menu)	Semester & week assessed <i>(a dropdown menu in TracDat is provided for you to enter the data)</i>			
Process field	Describe actual assessment or provide prompt <i>(enter this information in the "Process" field in TracDat)</i>			
" "	Number of sections assessed / Total number of sections offered <i>(enter this information in the "Process" field in TracDat)</i>			
" "	Was same assessment prompt/question used for all sections? <i>(enter this information in the "Process" field in TracDat)</i>			
" "	Number of students assessed <i>(enter this information in the "Process" field in TracDat)</i>			
" "	Number of assessments evaluated <i>(enter this information in the "Process" field in TracDat)</i>			
" "	If 100 % of the assessments were not evaluated describe			

	the method of selection (random sampling/ cluster, etc.) <i>(enter this information in the "Process" field in TracDat)</i>			
" "	Who evaluated the assessments? (one instructor/ a committee meeting simultaneously / multiple instructors grading separately) <i>(enter this information in the "Process" field in TracDat)</i>			
" "	How was the assessment evaluated? (Was the same rubric used by all instructors/ other methods?) <i>(enter this information in the "Process" field in TracDat)</i>			
Appropriate boxes for each instructional modality	Total Number & % of students that met minimum achievement level <i>(disaggregate data for sections taught – 100% on- ground / 100% online / hybrid)</i>			
REFLECTION field	Reflect on the results. (e.g. what worked or did not work in the curriculum/pedagogy, assessment method, prompt, SLO) <i>(enter brief information into the Reflection field in TracDat)</i>			
NEXT STEP field (a dropdown menu)	If you select "No change" in TracDat, you are not required to add an Action/Recommendation. If you select "Develop an Action Plan" or "Modify Outcome or ..." you should select the link for "add Action/Recommendation" at the bottom of the page after saving changes. If there is disparity in student success in modalities of instruction (online/hybrid/on ground)			

	create an action plan.			
Add Action/Recommendation field	Write an action plan that you think will assist in improving the achievement level or another goal. State what type of resources will be needed, if any, to achieve the goal. (e.g. personnel, facilities, budget)			
“ “	Indicate if resources will be needed using the dropdown menu box. (Yes / No)			

APPENDIX 2. Program/Departmental SLO Assessment Analysis Form

Instructions: In preparation for Program Review, each department should complete this form during their fall semester flex week meeting. Completion of this form serves as documentation that discussion and planning took place on the course assessment results obtained in the preceding academic year (summer through spring) and on any PSLO assessment that was performed in the previous year. If your department does not have a PSLO because you do not offer a certificate or degree, or if your program has a PSLO that was not assessed in the preceding year, reflect upon the collective CSLO assessments performed and the outcome(s) of any actions that were implemented as a result of previous assessments. Please use your prior year's Program Review Report (Outcomes Review Area narrative) and Outcomes-related plans made in the preceding year(s) as a guide for follow-up. Submit form electronically to your Department Chairperson and to the SLO Coordinator at sgracey@miracosta.edu.

1	Department	
2	Meeting Date	
3	Number of Faculty/Staff participating in dialogue Number of Faculty/Staff sharing Assessment	FULLTIME ASSOCIATE

	Results Total number of faculty/staff in department	
4	ISLOs, PSLOs and/or CSLOs measured List the SLOs whose assessment results were discussed in this meeting (if your department does not have a PSLO, indicate NA for "not applicable")	
5	Last Time these SLOs were assessed (Write in semester and year of the last time these were assessed)	

6	<p>Interventions attempted</p> <p>Describe what actions/interventions the department attempted after the ISLOs, PSLOs, and/or CSLOs were last assessed to improve student learning. What were the results of those interventions? If your department does not have PSLOs, describe the actions undertaken by the department to improve student success in the discipline and how CSLO results can inform steps needed to improve student learning at the institutional level (you may want to reference course data in TracDat and the prior Program Review Report to identify interventions that were stated).</p>	
7	<p>Assessment Tools</p>	

	<p>Give examples of major assignments your faculty used to measure the ISLOs, PSLOs, and/or CSLOs this time around.</p>	
8	<p>Assessment Results</p> <p>(Summarize the overall results of your departmental discussion)</p> <p>For example, the following list provides some suggestions for consideration but is not exhaustive:</p> <ul style="list-style-type: none"> • In general, how did students do on the most recent ISLO, PSLO, and/or CSLO assessments? 	

	<ul style="list-style-type: none">• What student needs and issues were revealed?• Were there any areas where student performance was outstanding?	
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	<ul style="list-style-type: none"> Any areas where it can be improved? How do your results impact potential performance in other courses offered by your department &/or program? 	
9	<p>Next Step in the Classroom to Improve Student Learning</p> <p>How might student performance be improved?</p> <p>Go through list. Retain what items faculty felt would help them address the needs and issues that were revealed by the assessment. Delete the rest.</p>	<ul style="list-style-type: none"> State goals or objectives of assignment/activity more explicitly Revise content of assignment/activities Revise the amount of writing/oral/visual/clinical or similar work Revise activities leading up to and/or supporting assignment Increase in-class discussions and activities Increase student collaboration and/or peer review Provide more frequent or more comprehensive feedback on assignments Increase guidance for students as they work on assignments Use methods of questioning that encourage the competency State criteria for grading more explicitly As an instructor, increase your interaction with students outside of class Ask a colleague to critique assignments/activities Collect more data Nothing; assessment indicates no improvement necessary Other (please describe)

10	<p>Next Step in the Department to Improve Student Learning</p> <p>Go through list. Retain what items faculty felt would help them address the needs and issues that were revealed by the assessment. Delete the rest.</p>	<ul style="list-style-type: none"> ○ Offer/encourage attendance at seminars, workshops or discussions about teaching methods ○ Consult teaching and learning experts about teaching methods ○ Encourage faculty to share activities that foster competency ○ Write collaborative grants to fund departmental projects to ○ Purchase articles/books on teaching about competency ○ Visit classrooms to provide feedback (mentoring) ○ Create bibliography of resource material ○ Have binder available for rubrics and results ○ Analyze course curriculum,, so that the department can build skills as students advance through courses ○ Nothing; assessments indicate no improvements necessary ○ Other (please describe)
11	Priorities to Improve Student Learning	

	<p>(List the top 3-6 things faculty/staff felt would <u>most</u> improve student learning and success in your discipline)</p>	
12	<p>Implementation</p> <p>(List the departmental plans to implement these priorities)</p>	

13	Timeline for Implementation (Make a timeline for implementation of your top priorities)	
14	Budget Implications What resources will you need to actualize your top priorities?	

APPENDIX 3: ACCJC Standards (2014)

What are the characteristics of institutional effectiveness set by the Accrediting Commission of Community and Junior Colleges (ACCJC) and where should the college be in terms of its SLO assessment?

STANDARD I.B.1. “The institution demonstrates a sustained, substantive and collegial dialog about student outcomes, student equity, academic quality, institutional effectiveness, and continuous improvement of student learning and achievement.”

I.B.2. “The institution defines and assesses student learning outcomes for all instructional programs and student and learning support services.” (ER 11)

I.B.4. “The institution uses assessment data and organizes its institutional processes to support student learning and student achievement.”

I.B.5. “The institution assesses accomplishment of its mission through program review and evaluation of goals and objectives, student learning outcomes, and student achievement. Quantitative and qualitative data are disaggregated for analysis by program type and mode of delivery.”

I.B.6. “The institution disaggregates and analyzes learning outcomes and achievement for subpopulations of students. When the institution identifies performance gaps, it implements strategies, which may include allocation or reallocation of human, fiscal and other resources, to mitigate those gaps and evaluates the efficacy of those strategies.”

I.B.8. “The institution broadly communicates the results of all of its assessment and evaluation activities so that the institution has a shared understanding of its strengths and weaknesses and sets appropriate priorities.”

I.C.1 “The institution assures the clarity, accuracy, and integrity of information provided to students and prospective students, personnel, and all persons or organizations related to its mission statement, learning outcomes, educational programs, and student support services. The institution gives accurate information to students and the public about its accreditation status with all of its accreditors.” (ER 20)

I.C.3. “The institution uses documented assessment of student learning and evaluation of student achievement to communicate matters of academic quality to appropriate constituencies, including current and prospective students and the public. (ER 19).”

I.C.4. “The institution describes its certificates and degrees in terms of their purpose, content, course requirements, and expected learning outcomes.”

STANDARD II. “The institution offers instructional programs, library and learning support

services, and student support services aligned with its mission. The institution's programs are conducted at levels of quality and rigor appropriate for higher education. The institution assesses its educational quality through methods accepted in higher education, makes the results of its assessments available to the public, and uses the results to improve educational quality and institutional effectiveness. The institution defines and incorporates into all of its degree programs a substantial component of general education designed to ensure breadth of knowledge and to promote intellectual inquiry. The provisions of this standard are broadly applicable to all instructional programs and student and learning support services offered in the name of the institution."

II.A.2. "Faculty, including full time, part time, and adjunct faculty, ensure that the content and methods of instruction meet generally accepted academic and professional standards and expectations. Faculty and others responsible act to continuously improve instructional courses, programs and directly related services through systematic evaluation to assure currency, improve teaching and learning strategies, and promote student success."

II.A.3 "The institution identifies and regularly assesses learning outcomes for courses, programs, certificates and degrees using established institutional procedures. The institution has officially approved and current course outlines that include student learning outcomes. In every class section, students receive a course syllabus that includes learning outcomes from the institution's officially approved course outline."

II.A.9. "The institution awards course credit, degrees and certificates based on student attainment of learning outcomes. Units of credit awarded are consistent with institutional policies that reflect generally accepted norms or equivalencies in higher education. If the institution offers courses based on clock hours, it follows Federal standards for clock-to-credit-hour conversions." (ER 10)

II.A.11. "The institution includes, in all of its programs, student learning outcomes appropriate to the program level in: communication competency, information competency, quantitative competency, analytic inquiry skills, ethical reasoning, the ability to engage diverse perspectives, and other program-specific learning outcomes.

II.A.12. "The institution requires of all of its degree programs a component of general education based on a carefully considered philosophy for both associate and baccalaureate degrees that is clearly stated in its catalog. The institution, relying on faculty expertise, determines the appropriateness of each course for inclusion in the general education curriculum, based upon student learning outcomes and competencies appropriate to the degree level. The learning outcomes include a student's preparation for and acceptance of responsible participation in civil society, skills for lifelong learning and application of learning, and a broad comprehension of the development of knowledge, practice, and interpretive approaches in the arts and humanities, the sciences, mathematics, and social sciences." (ER 12)

II.A.13. "All degree programs include focused study in at least one area of inquiry or in an established interdisciplinary core. The identification of specialized courses in an area of inquiry or interdisciplinary core is based upon student learning outcomes and competencies, and include mastery, at the appropriate degree level, of key theories and practices within the field of study."

II.A.16. "The institution regularly evaluates and improves the quality and currency of all instructional programs offered in the name of the institution, including collegiate, pre-collegiate, career-technical, and continuing and community education courses and programs, regardless of delivery mode or location. The institution systematically strives to improve programs and courses to enhance learning outcomes and achievement for students."

II.B.3. "The institution evaluates library and other learning support services to assure their adequacy in meeting identified student needs. Evaluation of these services includes evidence that they contribute to the attainment of student learning outcomes. The institution uses the results of these evaluations as the basis for improvement."

II.C.2. "The institution identifies and assesses learning support outcomes for its student population and provides appropriate student support services and programs to achieve those outcomes. The institution uses assessment data to continuously improve student support programs and services."

STANDARD III.A.6. "The evaluation of faculty, academic administrators, and other personnel directly responsible for student learning includes, as a component of that evaluation, consideration of how these employees use the results of the assessment of learning outcomes to improve teaching and learning."

STANDARD IV.C.8. "To ensure the institution is accomplishing its goals for student success, the governing board regularly reviews key indicators of student learning and achievement and institutional plans for improving academic quality."

APPENDIX 4. ACCJC Accreditation Standards (2014) – Excerpts Concerning Student Learning Outcomes

The 2002 ACCJC Standards and Principles concerning student learning outcomes were carried forward and clarified in the Accreditation Standards adopted in 2014. Expectations in the areas of student learning outcomes include the following:

- the institutional goals and objectives include student learning. Operational units of the institution support student learning through these institutional goals and objectives and their related unit goals;
- student learning outcomes are defined and assessed for all instructional programs, student support services and learning support services;
- assessment data are used to organize institutional processes, analyze student learning gaps and implement strategies, allocate resources, and continuously evaluate the efficacy of the institution's efforts to support and improve student learning;
- student learning outcomes results are communicated broadly across the institution and to external audiences, including prospective students, employers, and transfer institutions;
- student learning outcomes results are used by students as they progress through their programs of study and engage in other activities of the institution;
- the discussion of student learning is ongoing at both the institutional and programmatic levels, and is tied to data analysis, program review, planning, resource allocation and other institutional decision-making;
- support and improvement of student learning outcomes are critical factors in institutional innovation and in implementing new processes;
- student learning outcomes are in place for the institution's courses, programs, certificates and degrees, and are regularly assessed.
- assessment of the students' attainment of the learning outcomes happens continuously at the course level for adaptation and enhancement of instruction and instructional delivery;
- this assessment can also provide input into curriculum revision and course sequencing;
- program-level assessment of student learning is designed and conducted to ensure the content and methods of instruction meet academic standards and expectations, are current, and support the institution's mission and goals for

student success;

- program-level assessment of student learning also provides information necessary for instruction-wide and institution-wide planning and decision-making; and,
- Information about student learning outcomes assessment results is available at the appropriate levels of granularity for use by programs and across programs, and by the institution as a whole, in analysis and evaluation, planning and decision-making, and for implementing change.