Feedback for the 2015-2016 Annual Assessment Report
Department of Construction Management
Construction Management BS

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I. Summary Memo to the Deans/Chairs/Program Directors

To: **Chair, Department of Construction Management**
From: **Dr. Amy Liu, Director, Office of Academic Program Assessment (OAPA)**
Date: **Fall 2016**
Subject: **Feedback for the 2015-2016 Annual Assessment Report**
CC: **Office of Academic Affairs**

The 2015-2016 annual assessment reports are based on responses to the *2015-2016 Annual Assessment Report Template* prepared by the Office of Academic Program Assessment (OAPA). The feedback for the *2015-2016 Annual Assessment Report* is summarized below:

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We have used appropriate rubrics from WASC Senior College and University Commission (WSCUC) for guidance on effective assessment practices in several areas, including the quality of learning outcomes, assessment plans, methods/data/analysis, program review, general education, and the use of assessment data for curricular improvement, academic planning, and budgeting.

We hope all the previous **feedback** reports that you have received from the Office of Academic Program Assessment (2011-2015) in addition to the current one (2015-2016) will be used to help the academic unit (department, program, or college) determine the extent to which its current assessment system is adequate and what additional components or processes may need to be developed or improved for **all the degree programs** in the academic unit.

We would like to thank Dr. Don Taylor, Interim Assistant Vice President, Academic Programs and Educational Effectiveness, Kathy Mine, Administrative Support Coordinator, our assessment consultant team, and our student assistants, Christian and Paul Schoenmann, for their support in this assessment review process. If you have any questions or suggestions, please contact Dr. Amy Liu (liuqa@csus.edu), Director of OAPA. Thank you.

II. Detailed Feedback for the 2015-2016 Annual Assessment Report
BS CONSTRUCTION MANAGEMENT

Template Questions	Detailed Questions, Criteria, and Comments		
Q1: **Program Learning Outcomes (PLOs)**	**Q1.1.** Which of the following Program Learning Outcomes (PLOs) and Sac State Baccalaureate Learning Goals (BLGs) did you assess in 2015-2016?	**See Report**	Critical Thinking, Written Communication, Oral Communication, Quantitative Literacy, Team Work, Problem Solving, Ethical Reasoning, Overall Competencies in the Major/Discipline
	Q1.2. Please provide more detailed background information about each PLO you check above and other information such as how your specific PLOs were explicitly linked to the Sac State BLGs?	**Missing**	
	Q1.2.1. Do you have rubrics for your PLOs?	**Yes**	(2= Yes for some PLOs)
	Q1.3. Are your PLOs closely aligned with the mission of the university?	**Yes**	
	Q1.4. Is your program externally accredited (other than through WASC)?	**Yes**	
	Q1.4.1. If the answer to Q1.4 is yes, are your PLOs closely aligned with the mission/goals/outcomes of the accreditation agency?	**Yes**	
	Q1.5. Did your program use the Degree Qualification Profile (DQP) to develop your PLO(s)?	**No**	(3= No they don't know the DQP)
	Q1.6. Did you use action verbs to make each PLO measurable?	**Don't Know**	See Q1.2 above.
Q2: **Standards of Performance/Expectation for the Selected PLO**	**Q2.1.** Specify one PLO as an example to illustrate how you conducted assessment (be sure you checked the correct box for this PLO in Q1.1):	**See Report**	Problem Solving
	Q2.1.1. Please provide more information about the specific PLO you've chosen in Q2.1	**See Report**	Measured in core courses
	Q2.2. Has the program developed or adopted explicit standards of performance for this PLO?	**Yes**	
	Q2.3. Please provide the rubric(s) and standard of performance that you have developed for this PLO:	**Not Clear**	Standards and course scale were provided. **We don't know whether this is a program or course standard**. Rubric provided is developed by faculty who teaches the class not by the program faculty**. See Q3.4.**
	Q2.4. Please indicate where you have published the selected PLO:	**See Report**	Some syllabi, assessment material, new course proposals, and strategic plans

	Q2.5. Please indicate where you have published the standard of performance:	**See Report**	Assessment material and strategic plans
	Q2.6. Please indicate where you have published the rubric:	**See Report**	All syllabi, catalogue, assessment material, and strategic plan
Q3: **Data Collection Methods and Evaluation of Data Quality for the Selected PLO**	**Q3.1.** *Was assessment data/evidence* **collected** *for the selected PLO in 2015-2016?*	**Yes**	
	Q3.1.1. How many assessment tools/methods/measures **in total** did you use to assess this PLO?	**Don't Know**	
	Q3.2. If *yes, was the data scored/evaluated for this PLO in 2015-2016?*	**Yes**	
	Q3.2.1. Please describe how you collected the assessment data for the selected PLO. For example, in what course(s) or by what means were data collected?	**See Report**	CM 30, 130, and 140. Test results
Q3A: **Direct Measures (key assignments, projects,**	**Q3.3.** *Were direct measures [key assignments, projects, portfolios, etc.] used to assess this PLO?*	**Yes**	
	Q3.3.1. Which of the following direct measures were used?	**See Report**	Key required assignments and classroom based assessment
	Q3.3.2. Please explain and attach the direct measure you used to collect data.	**See Report**	**Nothing provided**. Collected, graded, and documented results of exam. Looked at specific problems.
	Q3.4. *What tool was used to evaluate the data?*	**2**	(2= Used rubric developed/modified by the faculty who teaches the class)
	Q3.4.1. If you used other means, which of the following measures was used?	**N/A**	
	Q3.4.2. *Was the rubric aligned directly and explicitly with the PLO?*	**Don't Know**	Program rubrics are not provided.
	Q3.4.3. *Was the direct measure (e.g. assignment, thesis, etc.) aligned directly and explicitly with the rubric?*	**Yes**	
	Q3.4.4. *Was the direct measure (e.g. assignments, thesis, etc.) aligned directly and explicitly with the PLO?*	**Yes**	
	Q3.5. How many faculty members participated in planning the assessment data collection of the selected PLO?	**See Report**	All five full time faculty
	Q3.5.1. How many faculty members participated in the evaluation of the assessment data for the selected PLO?	**See Report**	All five full time faculty
	Q3.5.2. If *the data was evaluated by multiple scorers, was there a norming process (a procedure to make sure everyone was scoring similarly)?*	**N/A**	**Please norm your evaluators.**
	Q3.6. How did you **select** the sample of student work [papers, projects, portfolios, etc.]?	**See Report**	Exams and assignments

	Q3.6.1. How did you decide how many samples of student work to review?	**See Report**	All students
	Q3.6.2. How many students were in the class or program?	**See Report**	Average of 35 students/class, or 250 in the program
	Q3.6.3. How many samples of student work did you evaluate?	**See Report**	"2 samples," presumably 2 samples from each student.
	Q3.6.4. Was the sample size of student work for the direct measure adequate?	**Yes**	
Q3B: **Indirect Measures (surveys, focus groups, interviews, etc.)**	*Q3.7. Were indirect measures used to assess the PLO?*	**Yes**	
	Q3.7.1. Which of the following indirect measures were used?	**See Report**	Student surveys, alumni surveys, advisory board surveys, other: senior exit interviews
	Q3.7.1.1. Please explain and attach the indirect measure you used to collect data:	**See Report**	First attachment: indirect measure. Alumni surveys sent our periodically and all seniors take 30min exit interview
	Q3.7.2. If surveys were used, how was the sample size decided?	**See Report**	Alumni - up to 3 years after graduation Seniors - all seniors for exit interviews
	Q3.7.3. If surveys were used, briefly specify how you selected your sample.	**N/A**	
	Q3.7.4. If surveys were used, what was the response rate?	**See Report**	25% alumni
Q3C: **Other Measures (external benchmarking, licensing exams, standardized tests, etc.)**	*Q3.8. Were external benchmarking data such as licensing exams or standardized tests used to assess the PLO?*	**No**	
	Q3.8.1. Which of the following measures were used?	**N/A**	
	Q3.8.2. Were other measures used to assess the PLO?	**Yes**	
	Q3.8.3. If other measures were used, please specify:	**See Report**	Results of national student competitions - peer assessment, over 50 awards since 2008 Employment rates - 100% for many years
Q4: **Data, Findings, and Conclusions**	**Q4.1.** Please provide simple tables and/or graphs to summarize the assessment data, findings, and conclusions:	**See Report**	New ACCE standards as of 2016, working to close the loop over the next year. **No data provided.**
	Q4.1a. Does the program explicitly assess the PLO?	**No**	Not closed the loop on assessment due to change in accreditation standards. No **explicit** program rubric, no direct measure prompt provided, unclear alignment between rubric, standard, direct measure and PLO. No data was presented.

	Q4.2. Are students doing well and meeting program standard? If not, how will the program work to improve student performance of the selected PLO?	**Don't Know**	
	Q4.2a. Can the readers come to the **SAME** conclusion?	**Don't know**	No explicit program rubric provided and no direct measure prompt provided in the report; unclear alignment between rubric, standard, direct measure and PLO.
	*Q4.3. Do students partially meet, meet, or exceed the program's standard of performance (Q2.2) **based on their** assessment data?*	**Don't Know**	
	Q4.3a. Can the readers come to the **SAME** conclusion as the program that students meet the expectations/standards for this learning outcome?	**Don't Know**	
Q4A: **Alignment and Quality**	*Q4.4. Did the data, including the direct measures, from all the different assessment tools/measures/methods directly align with the PLO?*	**Not Clear**	
	Q4.5. Were ALL the assessment tools/measures/methods that were used good measures for the PLO?	**Not Clear**	
Q5: **Use of Assessment Data (Closing the Loop)**	*Q5.1. As a result of the assessment effort in 2015-2016 and based on the prior feedback from OAPA, do you anticipate making any changes for your program (e.g., course structure, course content, or modification of PLOs)?*	**Yes**	
	Q5.1.1. Please describe what changes you plan to make in your program as a result of your assessment of this PLO. Include a description of how you plan to assess the impact of these changes.	**See Report**	
	Q5.1.2. Do you have a plan to assess the impact of the changes that you anticipate making?	**Yes**	
	Q5.2. How have the assessment data from last year (2014 - 2015) been used so far?	**See Report**	
	Q5.2.1. Please provide a detailed example of how you used the assessment data above.	**N/A**	
Additional Assessment Activities	**Q6.** Many academic units have collected assessment data on aspects of a program that are not related to PLOs (i.e., impacts of an advising center, etc.). **If** your program/academic unit has collected data on the program elements, please briefly report your results.	**See Report**	
	Q7. What PLO(s) do you plan to assess next year?	**See Report**	
	Q8. Have you attached any appendices?	**Yes**	Senior exit interviews
Summary	**S1.** Does the program follow the template by answering where applicable?	**Partially**	

	S2. Were the program's answers simple and clear?	**Yes**	
	S3. Does the program assess the PLO using correct alignment of standard, rubric, and measure (Q2.3, Q4.1a)?	**Not Clear**	See comments and feedback above.
	S4. Overall, *do students partially meet, meet, or exceed program's standard of performance* **based on consultant's** *review?*	**Don't Know**	We don't know whether students are meeting the program standards. See comments and feedback above.

III. Commendations and Recommendations

Commendations:

The program has shown efforts for assessment, and is commended for addressing the following areas well:

Program Learning Outcomes and their Alignment:
- Specified PLOs, performance indicators, and courses where the PLO is measured.

Measures, Rubrics and their Alignment:
- Used direct and indirect measures of student learning.

Standards of Performance at Graduation:
- Specified standard of 75% of students performing at "satisfactory" level.

Use of Assessment Data:
- Plan to use data to improve instruction.

Recommendations:

As the program continues its annual assessment efforts we encourage it to:

Measures, Rubrics and their Alignment:
- Include the prompts for the assignments used for assessment in the assessment report.
- Provide rubrics and standards for the **program**, not the **course**. This is the difference between course and program assessment.
- Consider adopting nationally developed VALUE rubrics to explicitly assess student learning outcomes such as problem solving.

Data Collection and Presentation:
- Include assessment data in the report.
- Include specific assessment data analysis in the report.
- Break out student performance using **percentages** by different levels of performance for specific criteria. In terms of instructional improvement, it would be very useful for the program to identify specific areas where student performance could be better.

Use of Assessment Data:
- Close the loop on assessment according to change in accreditation standards, and by using findings of student learning.
- Use curriculum maps to determine where else in the curriculum that particular concepts are practiced.

Summary:
- Use your **curriculum map** to help students develop their roadmaps (academic plan) for the degree, so that their roadmap to the degree is explicitly linked to student learning, PLOs, advising, and the mission of the program and the university.

Appendix 1: WSCUC "Rubric for Assessing the Quality of Academic Program Learning Outcomes"

Criterion	Initial	Emerging	Developed	Highly Developed
1. Comprehensive List	The list of outcomes is problematic: e.g., very incomplete, overly detailed, inappropriate, and disorganized. It may include only discipline-specific learning, ignoring relevant institution-wide learning. The list may confuse learning processes (e.g., doing an internship) with learning outcomes (e.g., application of theory to real-world problems).	The list includes reasonable outcomes but does not specify expectations for the program as a whole. Relevant institution-wide learning outcomes and/or national disciplinary standards may be ignored. Distinctions between expectations for undergraduate and graduate programs may be unclear.	The list is a well-organized set of reasonable outcomes that focus on the key knowledge, skills, and values students learn in the program. It includes relevant institution-wide outcomes (e.g., communication or critical thinking skills). Outcomes are appropriate for the level (undergraduate vs. graduate); national disciplinary standards have been considered.	The list is reasonable, appropriate, and comprehensive, with clear distinctions between undergraduate and graduate expectations, if applicable. National disciplinary standards have been considered. Faculty has agreed on explicit criteria for assessing students' level of mastery of each outcome.
2. Assessable Outcomes	Outcomes statements do not identify what students can do to demonstrate learning. "Statements understand scientific method" do not specify how understanding can be demonstrated and assessed.	Most of the outcomes indicate how students can demonstrate their learning.	Each outcome describes how students can demonstrate learning, e.g., "Graduates can write reports in APA style" or "Graduate can make original contributions to biological knowledge."	Outcomes describe how students can demonstrate their learning. Faculty has agreed on explicit criteria statements such as rubrics, and have identified example of student performance at varying levels of each outcome.
3. Alignment	There is no clear relationship between the outcomes and the curriculum that students experience.	Students appear to be given reasonable opportunities to develop the outcomes in the required curriculum.	The curriculum is designed to provide opportunities for students to learn and to develop increasing sophistication with respect to each outcome. This design may be summarized in a curriculum map.	Pedagogy, grading, the curriculum, relevant student support services, and co-curriculum are explicitly and intentionally aligned with each outcome. Curriculum map indicates increasing levels of proficiency.
4. Assessment Planning	There is no formal plan for assessing each outcome.	The program relies on short-term planning, such as selecting which outcome(s) to assess in current year.	The program has a reasonable, multi-year assessment plan that identifies when each outcome will be assessed. The plan may explicitly include analysis and implementation of improvements.	The program has a fully-articulated, sustainable, multi-year assessment plan that describes when and how each outcome will be assessed and how improvements based on findings will be implemented. The plan is routinely examined and revised, as needed.
5. The Student Experience	Students know little or nothing about the overall outcomes of the program. Communication of outcomes to students, e.g. in syllabi or catalog, is spotty or nonexistent.	Students have some knowledge of program outcomes. Communication is occasional and informal, left to individual faculty or advisors.	Students have a good grasp of program outcomes. They may use them to guide their own learning. Outcomes are included in most syllabi and are readily available in the catalog, on the web page, and elsewhere.	Students are well-acquainted with program outcomes and may participate in creation and use of rubrics. They are skilled at self-assessing in relation to the outcome levels of performance. Program policy calls for inclusion of outcomes in all course syllabi, and they are readily available in other program documents.

Appendix 2: WSCUC "Rubric for Assessing the Use of Capstone Experiences for Assessing Program Learning Outcomes"

Criterion	Initial	Emerging	Developed	Highly Developed
1. Relevant Outcomes and Lines of Evidence Identified	It is not clear which program outcomes will be assessed in the capstone course.	The relevant outcomes are identified, e.g., ability to integrate knowledge to solve complex problems; however, concrete plans for collecting evidence for each outcome have not been developed.	Relevant outcomes are identified. Concrete plans for collecting evidence for each outcome are agreed upon and used routinely by faculty who staff the capstone course.	Relevant evidence is collected; faculty have agreed on explicit criteria statements, e.g., rubrics, and have identified examples of student performance at varying levels of mastery for each relevant outcome.
2. Valid Results	It is not clear that potentially valid evidence for each relevant outcome is collected and/or individual faculty use idiosyncratic criteria to assess student work or performances.	Faculty have reached general agreement on the types of evidence to be collected for each outcome; they have discussed relevant criteria for assessing each outcome but these are not yet fully defined.	Faculty have agreed on concrete plans for collecting relevant evidence for each outcome. Explicit criteria, e.g., rubrics, have been developed to assess the level of student attainment of each outcome.	Assessment criteria, such as rubrics, have been pilot-tested and refined over time; they usually are shared with students. Feedback from external reviewers has led to refinements in the assessment process, and the department uses external benchmarking data.
3. Reliable Results	Those who review student work are not calibrated to apply assessment criteria in the same way; there are no checks for inter-rater reliability.	Reviewers are calibrated to apply assessment criteria in the same way or faculty routinely check for inter-rater reliability.	Reviewers are calibrated to apply assessment criteria in the same way, and faculty routinely check for inter-rater reliability.	Reviewers are calibrated, and faculty routinely find assessment data have high inter-rater reliability.
4. Results Are Used	Results for each outcome may or may not be are collected. They are not discussed among faculty.	Results for each outcome are collected and may be discussed by the faculty, but results have not been used to improve the program.	Results for each outcome are collected, discussed by faculty, analyzed, and used to improve the program.	Faculty routinely discuss results, plan needed changes, secure necessary resources, and implement changes. They may collaborate with others, such as librarians or Student Affairs professionals, to improve results. Follow-up studies confirm that changes have improved learning.
5. The Student Experience	Students know little or nothing about the purpose of the capstone or outcomes to be assessed. It is just another course or requirement.	Students have some knowledge of the purpose and outcomes of the capstone. Communication is occasional, informal, left to individual faculty or advisors.	Students have a good grasp of purpose and outcomes of the capstone and embrace it as a learning opportunity. Information is readily avail-able in advising guides, etc.	Students are well-acquainted with purpose and outcomes of the capstone and embrace it. They may participate in refining the experience, outcomes, and rubrics. Information is readily available.

Appendix 3: WSCUC "Rubric for Assessing the Use of Portfolios for Assessing Program Learning Outcomes"

Criterion	Initial	Emerging	Developed	Highly Developed
1. Clarification of Students' Task	Instructions to students for portfolio development provide insufficient detail for them to know what faculty expect. Instructions may not identify outcomes to be addressed in the portfolio.	Students receive some written instructions for their portfolios, but they still have problems determining what is required of them and/or why they are compiling a portfolio.	Students receive written instructions that describe faculty expectations in detail and include the purpose of the portfolio, types of evidence to include, role of the reflective essay (if required), and format of the finished product.	Students in the program understand the portfolio requirement and the rationale for it, and they view the portfolio as helping them develop self-assessment skills. Faculty may monitor the developing portfolio to provide formative feedback and/or advise individual students.
2. Valid Results	It is not clear that valid evidence for each relevant outcome is collected and/or individual reviewers use idiosyncratic criteria to assess student work.	Appropriate evidence is collected for each outcome, and faculty have discussed relevant criteria for assessing each outcome.	Appropriate evidence is collected for each outcome; faculty use explicit criteria, such as agreed-upon rubrics, to assess student attainment of each outcome. Rubrics are usually shared with students.	Assessment criteria, e.g., in the form of rubrics, have been pilot-tested and refined over time; they are shared with students, and student may have helped develop them. Feedback from external reviewers has led to refinements in the assessment process. The department also uses external benchmarking data.
3. Reliable Results	Those who review student work are not calibrated to apply assessment criteria in the same way, and there are no checks for inter-rater reliability.	Reviewers are calibrated to apply assessment criteria in the same way or faculty routinely check for inter-rater reliability.	Reviewers are calibrated to apply assessment criteria in the same way, and faculty routinely check for inter-rater reliability.	Reviewers are calibrated; faculty routinely find that assessment data have high inter-rater reliability.
4. Results Are Used	Results for each outcome are collected, but they are not discussed among the faculty.	Results for each outcome are collected and discussed by the faculty, but results have not been used to improve the program.	Results for each outcome are collected, discussed by faculty, and used to improve the program.	Faculty routinely discuss results, plan needed changes, secure necessary resources, and implement changes. They may collaborate with others, such as librarians or Student Affairs professionals, to improve student learning. Students may also participate in discussions and/or receive feedback, either individual or in the aggregate. Follow-up studies confirm that changes have improved learning.
5. If e-Portfolios Are Used	There is no technical support for students or faculty to learn the software or to deal with problems.	There is informal or minimal formal support for students and faculty.	Formal technical support is readily available and proactively assists in learning the software and solving problems.	Support is readily available, proactive, and effective. Tech support personnel may also participate in refining the overall portfolio process.

Appendix 4: WSCUC "Rubric for Assessing the Integration of Student Learning Assessment into Program Reviews"

Criterion	Initial	Emerging	Developed	Highly Developed
1. Required Elements of the Self-Study	Program faculty may be required to provide a list of program-level student learning outcomes.	Faculty are required to provide the program's student learning outcomes and summarize annual assessment findings.	Faculty are required to provide the program's student learning outcomes, annual assessment studies, findings, and resulting changes. They may be required to submit a plan for the next cycle of assessment studies.	Faculty are required to evaluate the program's student learning outcomes, annual assessment findings, bench-marking results, subsequent changes, and evidence concerning the impact of these changes. They present a plan for the next cycle of assessment studies.
2. Process of Review	Internal and external reviewers do not address evidence concerning the quality of student learning in the program other than grades.	Internal and external reviewers address indirect and possibly direct evidence of student learning in the program; they do so at the descriptive level, rather than providing an evaluation.	Internal and external reviewers analyze direct and indirect evidence of student learning in the program and offer evaluative feedback and suggestions for improvement. They have sufficient expertise to evaluate program efforts; departments use the feedback to improve their work.	Well-qualified internal and external reviewers evaluate the program's learning outcomes, assessment plan, evidence, benchmarking results, and assessment impact. They give evaluative feedback and suggestions for improvement. The department uses the feedback to improve student learning.
3. Planning and Budgeting	The campus has not integrated program reviews into planning and budgeting processes.	The campus has attempted to integrate program reviews into planning and budgeting processes, but with limited success.	The campus generally integrates program reviews into planning and budgeting processes, but not through a formal process.	The campus systematically integrates program reviews into planning and budgeting processes, e.g., through negotiating formal action plans with mutually agreed-upon commitments.
4. Annual Feedback on Assessment Efforts	No individual or committee on campus provides feedback to departments on the quality of their outcomes, assessment plans, assessment studies, impact, etc.	An individual or committee occasionally provides feedback on the quality of outcomes, assessment plans, assessment studies, etc.	A well-qualified individual or committee provides annual feedback on the quality of outcomes, assessment plans, assessment studies, etc. Departments use the feedback to improve their work.	A well-qualified individual or committee provides annual feedback on the quality of outcomes, assessment plans, assessment studies, benchmarking results, and assessment impact. Departments effectively use the feedback to improve student learning. Follow-up activities enjoy institutional support
5. The Student Experience	Students are unaware of and uninvolved in program review.	Program review may include focus groups or conversations with students to follow up on results of surveys	The internal and external reviewers examine samples of student work, e.g., sample papers, portfolios and capstone projects. Students may be invited to discuss what they learned and how they learned it.	Students are respected partners in the program review process. They may offer poster sessions on their work, demonstrate how they apply rubrics to self-assess, and/or provide their own evaluative feedback.

Appendix 5: WSCUC "Rubric for Evaluating General Education Assessment Process"

Criterion	Initial	Emerging	Developed	Highly Developed
1. GE Outcomes	GE learning outcomes have not yet been developed for the entire GE program; there may be one or two common ones, e.g., writing, critical thinking.	Learning outcomes have been developed for the entire GE program, but list is problematic (e.g. too long, too short, unconnected to mission and values). Outcomes do not lend themselves to demonstrations of student learning.	The list of outcomes is a well-organized set of reasonable outcomes that focus on the most important knowledge, skills, and values of the GE program. Outcomes express learning can be demonstrated. Work to define levels of performance is beginning.	The list of outcomes is reasonable and appropriate. Outcomes describe how students can demonstrate learning. Faculty have agreed on explicit criteria, such as rubrics, for assessing students' mastery and have identified exemplars of student performance at varying levels for each outcome.
2. Curriculum Alignment with Outcomes	There is no clear relationship between the outcomes and the GE curriculum. Students may not have opportunity to develop each outcome adequately.	Students appear to have reasonable opportunities to develop each of the GE outcomes. Curriculum map may indicate opportunities to acquire outcomes. Sequencing and frequency of opportunities may be problematic	The curriculum is explicitly designed to provide opportunities for students to learn and to develop increasing sophistication with respect to each outcome. Design may be summarized in a curriculum map that shows "beginning," "intermediate" and "advanced" treatment of outcomes.	GE curriculum, pedagogy, grading, advising, etc. explicitly aligned with GE outcomes. Curriculum map and rubrics in use well known and consistently used. Co-curriculum and relevant student support services are also viewed as resources for GE learning and aligned with GE outcomes.
3. Assessment Planning	There is no formal plan for assessing each GE outcome. There is no coordinator or committee that takes responsibility for the program or implementation of its assessment plan.	GE assessment relies on short-term planning, such as selecting which outcome(s) to assess in the current year. Interpretation and use of findings for improvement are implicit rather than planned or funded. There is no individual or committee "in charge."	The campus has a reasonable, multi-year assessment plan that identifies when each GE outcome will be assessed. The plan includes specific mechanisms for interpretation and use of findings for improvement. A coordinator or committee is charged to oversee the program and its assessment.	The campus has a fully articulated, sustainable, multi-year assessment plan that describes when and how each outcome will be assessed. A coordinator or committee leads review and revision of the plan, as needed, based on experience and feedback from internal & external reviewers. The campus uses some form of comparative data (e.g., own past record, aspiration goals, external benchmarking).
4. Assessment Implementation	It is not clear that potentially valid evidence for each GE outcome is collected and/or individual reviewers use idiosyncratic criteria to assess student work.	Appropriate evidence is collected and faculty have discussed relevant criteria for assessing each outcome. Reviewers of student work are calibrated to apply assessment criteria in the same way, and/ or faculty check for inter-rater reliability.	Appropriate evidence is collected and faculty use explicit criteria, such as rubrics, to assess student attainment of each outcome. Reviewers of student work are calibrated to apply assessment criteria in the same way, and faculty routinely check for inter-rater reliability.	Assessment criteria, such as rubrics, have been pilot-tested and refined over time; and they usually are shared with students. Reviewers of student work are calibrated, and faculty routinely find high inter-rater reliability. Faculty take comparative data into account when interpreting results and deciding on changes to improve learning.
5. Use of Results	Results for GE outcomes are collected, but relevant faculty do not discuss them. There is little or no collective use of findings. Students are unaware of, uninvolved in the process.	Results for each GE outcome are collected and discussed by relevant faculty; results have been used occasionally to improve the GE program. Students are vaguely aware of outcomes and assessments to improve their learning.	Results for each outcome are collected, discussed by relevant faculty and others, and regularly used to improve the GE program. Students are very aware of and engaged in improvement of their GE learning.	Relevant faculty routinely discuss results, plan improvements, secure necessary resources, and implement changes. They may collaborate with others, such as librarians, student affairs professionals, students, to improve the program. Follow-up studies confirm that changes have improved learning.

Appendix 6: Sacramento State Baccalaureate Learning Goals for
The 21st Century & AAC&U's 16 VALUE Rubrics
http://www.csus.edu/wascaccreditation/Documents/Endnotes/E044.pdf

1. **Competence in the Disciplines**: The ability to demonstrate the competencies and values listed below in *at least one major field of study* and to demonstrate informed understandings of other fields, drawing on the knowledge and skills of disciplines outside the major.

2. **Knowledge of Human Cultures and the Physical and Natural World** through study in the *sciences and mathematics, social sciences, humanities, histories, languages, and the arts.* Focused by engagement with big questions, contemporary and enduring.

3. **Intellectual and Practical Skills, including:** *inquiry and analysis, critical, philosophical, and creative thinking, written and oral communication, quantitative literacy, information literacy, teamwork and problem solving,* practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance.
   - 3.1 Critical thinking   (WSCUC core competency)
   - 3.2 Information literacy   (WSCUC core competency)
   - 3.3 Written communication   (WSCUC core competency)
   - 3.4 Oral communication   (WSCUC core competency)
   - 3.5 Quantitative literacy   (WSCUC core competency)
   - 3.6 Inquiry and analysis   (Sixth VALUE rubric)
   - 3.7 Creative thinking   (Seventh VALUE rubric)
   - 3.8 Reading   (Eighth VALUE rubric)
   - 3.9 Teamwork   (Ninth VALUE rubric)
   - 3.10 Problem solving   (Tenth VALUE rubric)

4. **Personal and Social Responsibility (Values), including:** *civic knowledge and engagement—local and global, intercultural knowledge and competence*, ethical reasoning and action, foundations and skills for lifelong learning* anchored through active involvement with diverse communities and real-world challenges.
   - 4.1 Civic knowledge and engagement—local and global   (Eleventh VALUE rubric)
   - 4.2 Intercultural knowledge and competence   (Twelfth VALUE rubric)
   - 4.3 Ethical reasoning   (Thirteenth VALUE rubric)
   - 4.4 Foundations and skills for lifelong learning   (Fourteenth VALUE rubric)
   - 4.5 Global Learning   (Fifteenth VALUE rubric)

5. **Integrative Learning **, including:** *synthesis and advanced accomplishment* across general and specialized studies.
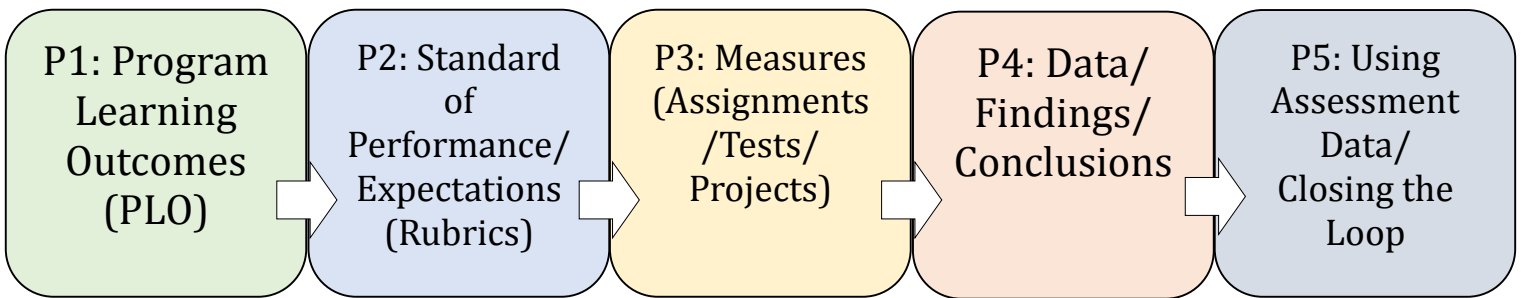   - a. Integrative and applied learning   (Sixteen VALUE rubric)

   All of the above are demonstrated through the application of knowledge, skills, and responsibilities (values) to new settings and complex problems.

   *Understanding of and respect for those who are different from oneself and the ability to work collaboratively with those who come from diverse cultural backgrounds.

** Interdisciplinary learning, learning communities, capstone or senior studies in the General Education program and/or in the major connecting learning goals with the content and practices of the educational programs including GE, departmental majors, the co-curriculum and assessments.

Appendix 7: Important Considerations for Programs Review & Assessment
(Update on 11/8/2016)

P1: Program Learning Outcomes (PLO)	P2: Standard of Performance/ Expectations (Rubrics)	P3: Measures (Assignments /Tests/ Projects)	P4: Data/ Findings/ Conclusions	P5: Using Assessment Data/ Closing the Loop

In the future, please keep the following questions in mind when the unit (program, department, or the college) reflects on assessing student learning outcomes and improving the programs:

P1 (Q1) Program Learning Outcomes (PLOs):
1.1. PLO List: What are your program learning outcomes (PLOs): **what should your students know, value, and be able to do (at the time of graduation)?**

1.2. Assessable Outcomes: Is each program learning outcome assessable? What **action verbs** are used?

1.3. Alignment:
1.3.1. Is each program learning outcome aligned closely with the curriculum, the key assignment, the rubric, pedagogy, grading, the co-curriculum, or relevant student support services?
1.3.2. Are the PLOs aligned closely with the mission of the university and the department/college?

1.4. Assessment Plan: Has an assessment plan for each program (department or college) been developed or updated? Have curriculum maps been developed? Does the plan clarify when, how, and how often each outcome will be assessed and used? Will all outcomes be assessed over a reasonable period of time such as within a six-year program review cycle? Is the plan sustainable in terms of human, fiscal, and other resources? Is the assessment plan revised as needed?

1.5. Student Experience: Are the PLOs widely shared? Are students aware of these learning outcomes? Do they often use them to assess the learning outcomes themselves? Where are the program learning outcomes published for view, e.g., across programs, with students, in the course syllabus, the department websites or catalogs?

P2 (Q2) Standards of Performance (Expectations)/Rubrics:

2.1 What are the explicit **PROGRAM** (not course) **standards of performance** for each outcome? What are the **expectations** for each outcome? Have the programs achieved the learning outcomes: **the standards** and/or **the expectations**?

2.2. Are **rubrics** needed to assess the PLOs? If **yes**, what rubrics are used to assess a particular PLO?

2.3. Are these PLOs (together with their standards of performance and achievement targets) able to demonstrate the **meaning, quality, integrity and uniqueness** of the degree program?

P3 (Q3) Measures Used:

3.1 What direct measures (key assignments, projects, portfolios, course work, student tests, etc.) are used to collect the data?

3.2 What indirect measures (national, university conducted, college/department/program, alumni, employer, and advisory board student surveys or focus groups or interviews, etc.) are used to collect the data?

3.3 Are external benchmarking data, such as licensing exams or standardized tests, used to assess the PLO?

3.4 Which other measures (national disciplinary, state/professional licensure exams, general knowledge and skills measures, other standardized knowledge and skill exams, etc.) are used?

P4 (Q4) Data and Findings:

4.1 What are the data, analyses, and findings for EACH program learning outcome?

4.2 What is the quality of the data: how reliable and valid is the data? Other than GPA, what data/evidences are used to determine whether your graduates have achieved the stated outcomes for the degree (BA/BS or MA/MS)? If two or more pieces of assessment data are used for each outcome, is the data consistent or contradictory?

4.3 Are the data, analyses, and findings clearly presented (in tables) so that they are easy for other faculty and the **general public** to understand and/or use?

P5 (Q5) Use of Data:

5.1 Who is going to use the data? Is the data used only for the course or for the program where the data is collected, or do you want the data to be used broadly for the curriculum, budgeting, or strategic planning at the department, the college, or the university level?

5.2 Follow-Up Assessment: Has the program conducted **follow-up assessment** to evaluate the effectiveness of program changes made based on assessment data? **If yes, how effective are those changes?**

Appendix 8.1: The Importance of Action Verbs

The Importance of Action Verbs (Mager, 1975, cited in Brown, 1995)	
Multiple Interpretations	**Fewer Interpretations**
➢ to know	➢ to write
➢ to understand	➢ to recite
➢ to really understand	➢ to identify
➢ to appreciate	➢ to sort
➢ to fully appreciate	➢ to solve
➢ to grasp the significance of	➢ to construct
➢ to enjoy	➢ to build
➢ to believe	➢ to compare
➢ to have faith in	➢ to contrast

Appendix 8.2: Relevant Verbs in Defining Learning Outcomes
(Based on Bloom's Taxonomy)

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Cite	Arrange	Apply	Analyze	Arrange	Appraise
Define	Classify	Change	Appraise	Assemble	Assess
Describe	Convert	Compute	Break Down	Categorize	Choose
Identify	Describe	Construct	Calculate	Collect	Compare
Indicate	Defend	Demonstrate	Categorize	Combine	Conclude
Know	Diagram	Discover	Compare	Compile	Contrast
Label	Discuss	Dramatize	Contrast	Compose	Criticize
List	Distinguish	Employ	Criticize	Construct	Decide
Match	Estimate	Illustrate	Debate	Create	Discriminate
Memorize	Explain	Interpret	Determine	Design	Estimate
Name	Extend	Investigate	Diagram	Devise	Evaluate
Outline	Generalize	Manipulate	Differentiate	Explain	Explain
Recall	Give Examples	Modify	Discriminate	Formulate	Grade
Recognize	Infer	Operate	Distinguish	Generate	Interpret
Record	Locate	Organize	Examine	Manage	Judge
Relate	Outline	Practice	Experiment	Modify	Justify
Repeat	Paraphrase	Predict	Identify	Organizer	Measure
Reproduce	Predict	Prepare	Illustrate	Perform	Rate
Select	Report	Produce	Infer	Plan	Relate
State	Restate	Schedule	Inspect	Prepare	Revise
Underline	Review	Shop	Inventory	Produce	Score
	Suggest	Sketch	Outline	Propose	Select
	Summarize	Solve	Question	Rearrange	Summarize
	Translate	Translate	Relate	Reconstruct	Support
		Use	Select	Relate	Value
			Solve	Reorganize	
			Test	Revise	

Page 37: Adapted from Gronlund (1991).

Allen, Mary. 2004. "Assessing Academic Programs in Higher Education". San Francisco, CA: Anker Publishing, Part of Jossey-Bass.

Appendix 9: Background Information for
Academic Program Assessment and Review

Ideally, academic program assessment and review at Sacramento State should be an ongoing process that facilitates continuous program improvement and includes the following areas[1]:

Assessment Plan: Each program needs to develop a program assessment plan which contains the following elements: Program goals and learning outcomes, methods for assessing progress toward these outcomes, and a timetable. This plan should be updated annually or frequently.

Annual Program Assessment Report: Program learning outcomes (PLOs) should be directly aligned with course learning outcomes (CLOs) and the University Baccalaureate Learning Goals (UBLGs). Programs are asked to provide the Office of Academic Affairs with an annual report (annual assessment report -AAR) on program assessment activities that occurred during the past academic year. These reports should identify learning goals and outcomes that were targeted for program assessment, measures used to evaluate progress toward those outcomes, data and analysis, and changes made or planned in response to the results. Annual program assessment and the assessment reports provide a solid foundation and data for the six year program review at Sacramento State.

Program Review: Each department undertakes an extensive program review every six years. As part of the program review process, departments are asked to use annual program assessment data to evaluate how well students are meeting program learning outcomes and university learning goals.

Thus, each department in our university should have in place a system for collecting and using evidence to improve student learning. So far, not all departments have established program learning outcomes and/or approaches to assess learning for all degree programs; it is essential to make these expectations explicit. This will help departments and colleges to assure that every degree program has or will have in place a quality assurance system for assessing and tracking student learning, and use this information to improve their respective programs. Importantly, departments should also present learning expectations, data, findings, and analysis in a way that is easy to understand and/or to use by the faculty, students, administration, the general public, accreditation agencies, and policy-makers.

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[1] Adapted from the information at http://webapps2.csus.edu/assessment/

Appendix 10: WASC Senior College and University Commission (WSCUC) GLOSSARY

(https://www.wascsenior.org/content/wasc-glossary)

A glossary of terms used in this report and by WSCUC accreditation is provided below. As WSCUC points in its most updated Handbook of Accreditation:

> *"Many of these terms have multiple meanings and/or have been used in different ways by different associations, institutions, and individuals. The definitions that follow represent the way WSCUC typically uses these words for purposes of institutional review and reporting. If local usage differs significantly from the definitions below, the institutions should consider translating its terms for accreditation purposes to avoid misunderstanding on the part of the evaluation term, WSCUC staff, and others" (WSCUC Handbook of Accreditation 2012:39)."*

To avoid misunderstanding by WSCUC and confusion at Sacramento State, Office of Academic Program Assessment has decided to use the same definitions from the WSCUC 2013 Handbook of Accreditation Glossary (linked above.)

AAC&U (Association of American Colleges and University) - Washington-based national organization dedicated to promotion of liberal learning and its integration with professional and civic education.

Accountability - in higher education, being answerable to the public, e.g., students, parents, policymakers, employers. Historically, accountability has focused on financial resources; emphasis now extends to students' academic progress, including retention, acquisition of knowledge and skills, and degree completion.

Alignment - connections among functions or dimensions of an institution that support achievement of goals, e.g., among curriculum, pedagogy, and expected outcomes; or priorities, planning, and resource allocation.

Assessment (of student learning) - an ongoing, iterative process consisting of four basic steps: 1. defining learning outcomes; 2. choosing a method or approach and then using it to gather evidence of learning; 3. analyzing and interpreting the evidence; and 4. using this information to improve student learning.

Benchmark - a point of reference or standard of excellence in relation to which something can be compared and judged. A specific level of student performance may serve as the benchmark that students are expected to meet at a particular point in time or developmental level. Retention and graduation rates may also be benchmarked against those of peer institutions or national norms.

Capstone – a culminating project or experience, usually associated with undergraduates but also applicable to graduate education, that generally takes place in the student's final year of study and requires review, synthesis, and application of what has been learned over the course of the student's college experience. The result may be a product (e.g., original research, an innovative engineering design, an art exhibit) or a performance (e.g., a recital, an internship, student teaching). The capstone can provide evidence for assessment of a range of outcomes, e.g., core competencies, general education outcomes, and institution-level outcomes, as well as those for the major or graduate degree.

Closing the Loop - refers to the four-step assessment cycle (see "assessment of student learning") and the need to complete the cycle in order to improve learning. "Completing the cycle" may be understood as 1. completing step 4; or 2. completing step 4 and then repeating the cycle to see whether the changes implemented have produced the desired result.

Co-curricular Learning - learning that takes place in activities and programs that are not part of the prescribed sequence of courses in an academic program.

Criterion-Referenced - testing or assessment in which student performance is judged in relation to pre-established standards and not in relation to the performance of other students.

Culture of Evidence – a habit of using evidence in assessment, decision making, planning, resource allocation, and other institutional processes that is embedded in and characteristic of an institution's actions and practices.

Curriculum Map - a visual representation, usually in the form of a table or matrix, which shows the alignment of course outcomes with program learning outcomes. Well-crafted curriculum maps also show development of proficiency levels, for example using terminology such as "beginning," "intermediate," and "advanced" or "introduced," "developed," and "mastered."

Degree Qualifications Profile (DQP) – a framework funded by the Lumina Foundation that describes the kinds of learning and levels of performance that may be expected of students who have earned an associate, baccalaureate, or master's degree.

Direct Method - in assessment of student learning, a way of gathering evidence of learning directly, e.g., through scoring of actual student work or performances, rather than indirectly, e.g., through self-reports, surveys, etc. Direct evidence can be supplemented by indirect evidence and descriptive data.

External Validation - corroboration or confirmation through an outside source. External validation has two dimensions: 1. data from external sources may be used to confirm that something has been accurately judged and documented; and 2. external reviewers may be invited to examine the evidence. External validation can bring fresh perspectives and lend credibility. See also "external evaluator."

Formative Assessment - assessment intended to provide feedback and support for improved performance as part of an ongoing learning process, whether at the student, program, or institution level. See also "summative assessment."

Goal - 1. In assessment of student learning, a high-level, very general statement of learning expected of graduates, aligned with the institution's mission, vision, and values (more specific learning outcomes are derived from goals); 2. A statement developed by an institution or program related to strategic planning, financial development, and other important issues.

High-Impact Practice (HIP): HIPs include first year seminars, common intellectual experiences, learning communities, writing-intensive courses, collaborative assignments, undergraduate research, diversity/global learning, service learning, internships, and capstone courses or projects. Research suggests that if students experience one or more HIPS in the course of their studies, they are more likely to persist, achieve higher levels of learning, and complete their degrees.

Indirect Method - in assessment of student learning, a way to capture evidence of learning in the form of opinions—for example, of students, employers, and alumni—by means of surveys, focus groups, exit interviews, etc. Indirect evidence is mediated by personal perceptions and experiences, and learning can only be inferred. Indirect evidence may be supplemented by descriptive data.

Liberal Education and America's Promise (LEAP) – a project of AAC&U, the LEAP outcomes (also known as Essential Learning Outcomes) total 12, grouped under the headings "Knowledge of Human Cultures and the Natural and Physical World," "Intellectual and Practical Skills," "Personal and Social Responsibility," and "Integrative and Applied Learning."

Mission - in higher education, an institution's formally adopted statement of its fundamental reasons for existence, its shared purposes and values, and the students that it aims to serve. The mission is central to decisions about priorities and strategic objectives and provides a context for WSCUC decisions about quality and accreditation.

Norming - 1. In assessment of student learning, a process of training raters to evaluate student products and performances consistently, typically using criterion-referenced standards and rubrics; 2. In accreditation, can be applied to other reviewing and rating processes, e.g. institutional evaluation, Commission actions.

Norm-Referenced - testing or assessment in which student performance is judged in relation to the performance of a larger group of students, not measured against a pre-established standard.

OAPA - Office of Academic Program Assessment at Sacramento State located in Library 67.

Objective - in assessment of student learning, a concise statement of what the instructor (or program or institution) intends a student to learn (on some campuses, objectives then lead to development of learning outcomes); 2. Sometimes used interchangeably with "outcome," but "outcome" has become the more common usage because of its more direct focus on the result (or "outcome") for the student; 3. In institution- or program-level planning, more specific statements derived from general goals; 4. in psychometrics, a test consisting of factual questions requiring short answers that can be reliably scored using an answer key, minimizing subjective judgments.

Outcome - in assessment of student learning, a concise statement of what the student should know or be able to do. Well-articulated learning outcomes describe how a student can demonstrate the desired outcome; verbs such as "understand" or "appreciate" are avoided in favor of observable actions, e.g., "identify," "analyze." Learning outcomes can be formulated for different levels of aggregation and analysis. Student learning outcomes are commonly abbreviated as SLOs, course learning outcomes as CLOs, program learning outcomes as PLOs, and institution-level outcomes as ILOs. 2. Other outcomes may address access, retention and graduation, and other indicators aligned with institutional mission and goals.

Persistence - like "retention," refers to the rate at which students return to college from semester to semester and year to year, or "persist" in their education. Some educators interpret "retention" as putting the responsibility for degree completion on the institution, whereas "persistence" puts the responsibility on the student.

Planning (Assessment) - the development of a design by which an institution sets goals and objectives and identifies the means to measure their accomplishment. *Institutional* planning may address educational programs, support services, the physical plant, budgets and finances, and other aspects of institutional operation and future development.

Portfolio - In assessment of student learning, a method of collecting student work so that the evidence can be reviewed in relation to specific learning outcomes. Most student portfolios also include a reflection on the learning process. Portfolios are highly adaptable: they may be developmental (showing progress from rough draft to finished product) or cumulative (i.e., students' "best work"); and they may be assembled at the level of the individual student, program, or institution.

Program - 1. A systematic, usually sequential, grouping of courses that forms a considerable part, or all, of the requirements for a degree in a major or professional field; 2. sometimes refers to the total educational offering of an institution.

Program Review - a systematic process of examining the capacity, processes, and outcomes of a degree program or department in order to judge its quality and effectiveness and to support improvement. Historically, program review focused primarily on capacity and research output; more recently, educational outcomes and student success have been included. While student success and assessment of learning at the program level are an important part of program review, they should not be confused with the more encompassing process of program review.

Reliability - in psychometrics and assessment of student learning, the consistency and dependability of judgments and measurements. See also "validity."

Retention - typically refers to the rate at which students return and re-enroll in college from semester to semester and year to year; retention rates from first to second year are of particular interest, since that is when the heaviest attrition is likely to occur.

Rigor - in education, refers both to a challenging curriculum and to the consistency or stringency with which high standards for student learning and performance are upheld.

Rubric – a tool 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. 2. WSCUC has developed a number of rubrics to assist teams and institutions in evaluating various aspects of their curriculum and assessment processes.

Signature Assignment - an embedded assessment method using an assignment—either the identical assignment or multiple assignments all constructed according to a common template— across multiple courses or sections of courses. A sample of students' work products is then examined using a rubric to arrive at judgments about the quality of student learning across the course, program, or institution. Alternatively, a signature question may be embedded, for example, in final exams.

Standard - broadly refers to statements of expectations for student learning, which may include content standards, performance standards, and benchmarks. In the K-12 arena, standards generally describe content, but not level of mastery. In higher education, in contrast, standards generally refer to expected levels of mastery or proficiency. Not to be confused with standards of accreditation.

Standard of Performance - the degree of skill or proficiency with which a student demonstrates a learning outcome. WSCUC Standard 2, CFR 2.2a, requires institutions to report on their students' levels of performance at or near the time of graduation in five core competencies: writing, oral communication, quantitative reasoning, critical thinking, and information literacy. Standards of performance are set by faculty and other educators on campus.

Standardized - a good practice meaning that a protocol or set of guidelines is consistently followed. For example, individuals may be trained in using scoring rubrics or conducting focus groups such that their activities are "standardized" to support the collection of reliable data. Commercially available tests are often referred to as "standardized tests," and "standardized" has acquired negative connotations in some circles.

Standards of Accreditation - standards of accreditation are the principles used as a basis for judgment in accreditation reviews. WSCUC has four Standards that flow from three Core Commitments. They are used to guide institutions in assessing institutional performance, to identify areas needing improvement, and to serve as the basis for judgment of the institution by evaluation teams and the Senior College Commission

Student Success – a phrase often used as shorthand for retention and degree completion. For WSCUC, student success includes quality of learning and rigor as well as retention and completion.

Student-Centeredness - 1) a shift in perspective from teaching and inputs (e.g., assignments) to desired outcomes and what students actually learn; 2) an approach that places the student (the learner) at the center of the educational process by providing more curricular flexibility, more accessible services, a supportive campus climate, and so on.

Summative Assessment - 1. assessment that occurs at the conclusion or end point of a course, program, or college experience to determine whether student learning outcomes have been achieved; 2. applied organizationally, the use of certain methods to evaluate the overall effectiveness of a program, an institution, or some element of the course of study. See also "formative assessment."

Sustainability - ability of an educational institution to maintain effective functioning and improve over the long term. Assumes financial viability, but also availability of human capital and other resources, as well as vision, planning, and flexibility.

Triangulation - the use of multiple methods to generate more robust evidence and to see whether results converge or diverge.

Validity - in psychometrics and assessment of student learning, refers to how well a particular assessment method actually measures what it is intended to measure. Considerations include construct validity, content validity, and face validity. May also refer to consequences, i.e., whether an assessment has "consequential validity" and will support subsequent actions to improve learning. See also "reliability."

VALUE rubrics - Valid Assessment of Learning in Undergraduate Education; a set of fifteen rubrics developed by AAC&U in collaboration with hundreds of faculty to assess learning outcomes defined by the LEAP project. Institutions may download the rubrics at no cost and are encouraged to modify them to suit local needs.

Value-added - 1. in higher education, the contribution that institutions make to their students' learning and development, documented from students' entry to exit; 2. a WSCUC value, namely to promote an accreditation process that adds value to institutions and helps them to achieve their own goals.

WASC - See WSCUC.

WSCUC (*formerly* **WASC**) - "Western Association of Schools and Colleges" The three Commissions under the WSCUC umbrella: [1] the Accrediting Commission for Schools (ACS); [2] the Accrediting Commission for Community and Junior Colleges (ACCJC); and [3] the Accrediting Commission for Senior Colleges and Universities (ACSCU), also referred to as the Senior College Commission.
In the context of the 2013 Handbook, WSCUC refers to the Senior College Commission.