

**Feedback for the 2014-2015 Annual Assessment Report**

**Department of Computer Science**

***Computer Science BS***

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**California State University, Sacramento**



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

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| **To:** | **Chair,**  **Department of Computer Science** |
| **From:** | **Office of Academic Program Assessment (OAPA)** |
| **Date:** | **Fall 2015** |
| **Subject:** | **Feedback for the 2014-2015 Annual Assessment Report**  |
| **CC:** | **Office of Academic Affairs** |

The 2014-2015 annual assessment reports are based on responses to the [*2014-2015 Annual Assessment Report Template*](http://www.csus.edu/programassessment/annual-assessment/Guidelines%2C%20Template%20and%20Example%20pdfs/2014-15%20Assessment%20Template%20v19%20final.pdf) prepared by the [Office of Academic Program Assessment](http://www.csus.edu/programassessment/index.html) (OAPA). The feedback for the *2014-2015 Annual Assessment Report* is summarized below:

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| **Section:**  | **Details:**  |
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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, and the use of assessment data for curricular improvement, academic planning, and budgeting. These rubrics were provided in appendices in the*Feedback for the 2012-2013 Annual Assessment Report*, and will not be repeated here.

We hope all the previous **feedback** reports that you have received in recent years from OAPA (2011-2012, 2012-2013, and 2013-2014) in addition to the current one (2014-2015) 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, and Academic Programs, Janett Torset, Kathy Mine, 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 2014-2015 Annual Assessment Report
Computer Science BS**

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| **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 2014-2015? | **Yes** | Written CommunicationEthical Reasoning |
| **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? | **Yes** | Table showing alignment of PLOs with BLGs |
| **Q1.2.1.** Do you have rubrics for your PLOs? | **2** | Yes for some PLOsRubrics for some courses. Rubric used for assessment of writing |
| **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)? (If No or Don’t know, skip to Q1.5) | **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)? | **2** | No but I know what DQP is |
| **Q1.6.** Did you use action verbs to make each PLO measurable? | **Yes** | For ethical reasoning, some verbs are not action types. For e.g., Indicators f-2 and f-4 use “Understand” as opposed to “Demonstrate understanding.” The assignment, however, does involve demonstrating understanding. |
| 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): | **Yes** | Ethical reasoning |
| **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:  | **Partial** | A student standard is identified (students need a 70% grade to demonstrate minimal competence). But the program has not said what percentage of students should meet the minimum (i.e., what is the program standard). |
| **Q2.4.** Please indicate the category in which the selected PLO falls into. | **Yes** |  |
| **Q2.5.** Please indicate where you have published the PLO: | **Yes** | In all but for university catalog and budget plans. |
| **Q2.6.** Please indicate where you have published the standard of performance: | **Yes** | In program review reports and ABET/CAC Self-Study. |
| **Q2.7.** Please indicate where you have published the rubric that measures the PLO: | **Yes** | In program review reports and ABET/CAC Self-Study. |
| 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 2014-2015? (If No, Don’t know, N/A, skip to Q6) | **Yes** |  |
| **Q3.1A.** How many assessment tools/methods/measures **in total** did you use to assess this PLO? | **Yes** | Three: test-embedded questions, student papers and survey of field supervisors. |
| **Q3.2. If** yes, was the data scored/evaluated for this PLO in 2014-2015? (If No, Don’t know, N/A, skip to Q6) | **Yes** |  |
| **Q3.2A.** 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? | **Yes** | Collected data from three courses: two CSC and one PHIL course. |
| Q3A: **Direct Measures (key assignments, projects,**  | **Q3.3.** Were direct measures [key assignments, projects, portfolios, etc.] used to assess this PLO? (If No or Don’t know, skip to Q3.7) | **Yes** |  |
| **Q3.3.1.** Which of the following direct measures were used? | **Yes** | Key assignments from required classes and classroom based performance |
| **Q3.3.2.** Please attach the direct measure you used to collect data. | **Yes** | See Attachment A |
| **Q3.4.** How was the data evaluated? (If No, skip to Q3.5) | **1** | No rubric used |
| **Q3.4.1.** Was the direct measure (e.g. assignment, thesis, etc.) aligned directly and explicitly with the PLO? | **Missing** | This question does not require a rubric. |
| **Q3.4.2.** Was the direct measure (e.g. assignment, thesis, etc.) aligned directly and explicitly with the rubric? | **N/A** |  |
| **Q3.4.3.** Was the rubric aligned directly and explicitly with the PLO? | **N/A** |  |
| **Q3.5.** How many faculty members participated in planning the assessment data collection of the selected PLO? | **Yes** | One |
| **Q3.5.1. If** the data was evaluated by multiple scorers, was there a norming process (a procedure to make sure everyone was scoring similarly)? | **N/A** |  |
| **Q3.6.** How did you **select** the sample of student work [papers, projects, portfolios, etc.]? | **Yes** | Instructors of courses decided. |
| **Q3.6.1.** How did you decide how many samples of student work to review? | **Yes** | Each sample consisted of all the students in the class who completed relevant work. |
| **Q3.6.2.** How many students were in the class or program? | **Yes** | 104 students in PHIL 103 and 30 in CSC 138. |
| **Q3.6.3.** How many samples of student work did you evaluate? | **Yes** | Each sample consisted of all the students in the classes. |
| **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? (If No, skip to Q3.8) | **Yes** | The survey of supervisors is actually a direct measure, as they are assessing the student’s performance. |
| **Q3.7.1.** Which of the following indirect measures were used? | **Yes** | Employer surveys. |
| **Q3.7.2. If** surveys were used, how was the sample size decided? | **Yes** | Sample size determined by the number of students registered in the internships. |
| **Q3.7.3.** **If** surveys were used, briefly specify how you selected your sample. | **Yes** |  |
| **Q3.7.4. If** surveys were used, what was the response rate? | **Yes** | The response rate is 100%.  |
| 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? (If No, skip to Q3.8.2) | **No** |  |
| **Q3.8.1.** Which of the following measures were used? | **N/A** |  |
| **Q3.8.2.** Were other measures used to assess the PLO? (If No or Don’t Know, skip to Q3.9) | **No** |  |
| **Q3.8.3.** If other measures were used, please specify: | **N/A** |  |
| Q3D: **Alignment and Quality** | **Q3.9.** Did the data, including the direct measures, from all the different assessment tools/measures/methods directly align with the PLO? | **Not Clear** | Without the grading scheme, it is difficult to tell what the 93.75% means. For example, were writing skills considered in the score? |
| **Q3.9.1.** Were ALLthe assessment tools/measures/methods that were used good measures for the PLO? | **Not Clear** | The prompt is directly aligned with the PLO, but without the grading scheme it’s hard to know if the data is aligned. |
| Q4: **Data, Findings, and Conclusions** | **Q4.1.** Please provide simple tables and/or graphs to summarize the assessment data, findings, and conclusions: | **Yes** | Table 2 is excellent. |
| **Q4.1a.** Does the program explicitly assess the PLO?  | **Not Clear** | Probably. |
| **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? | **Not Clear** | Probably. The scores are very high. But we would need the grading scheme to know for certain. |
| **Q4.2a.** Can the readers come to the **SAME** conclusion? | **Partial** |  |
| **Q4.3.** Do students partially meet, meet, or exceed the program’s standard of performance (Q2.2) **based on their** assessment data? | **Not Clear** |  |
| **Q4.3a.** Can the readers come to the **SAME** conclusion as the program that students meet the expectations/standards for this learning outcome? | **Partial** |  |
| Q5: **Use of Assessment Data (Closing the Loop)** | **Q5.1.** As a result of the assessment effort in 2014-2015 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)? (If No or Don’t Know, skip to Q6) | **Partial** | They do not anticipate making any changes. |
| **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. | **N/A** |  |
| **Q5.1.2.** Do you have a plan to assess the impact of the changes that you anticipate making? | **N/A** |  |
| **Q5.2.** How have the assessment data from last year (2013 - 2014) been used so far? | **Yes** | They report N/A for all possibilities. |
| **Q5.2.1.** Please provide a detailed example of how you used the assessment data above. | **Missing** | I’d like them to explain these N/As. |
| **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. | **N/A** |  |
|  | **Q7.** What PLO(s) do you plan to assess next year? | **Yes** | Six PLOs: Critical thinking, quantitative literacy, inquiry and analysis, problem solving, integrative and applied learning, overall competencies in the major. |
| **Q8.** Have you attached any appendices? | **Yes** | Attachment A.Direct Measures Used to Assess Performance Indicators for PLO 13 Ethical Reasoning |
| **Summary** | **S1.** Does the program follow the template by answering where applicable? | **Yes** |  |
| **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)? | **Partial** | Yes, except for lack of programmatic standard and grading scheme. |
| **S4. Overall,** do students partially meet, meet, or exceed program’s standard of performance **based on consultant’s** review (Q4.3a)? | **Partial** |  |

\*Highlighted (close-ended) questions receive answers corresponding to assessment report answer.
Open-ended questions receive answers based on consultant remarks using consultant legend:
1) Yes; 2) Partially; 3) Don’t Know; 4) No; 5) Not-Clear; 8) Not-Applicable; 9) Missing

**III. Commendations and Recommendations**

Commendations**:**The program continues to effectively assess their students’ learning outcomes, and is commended for addressing the following areas well:

# Program Learning Outcomes and their Alignment:

# Clearly articulated PLOs and defined them in the context of this program.

# Revised PLOs to better reflect the discipline.

# Measures, Rubrics and their Alignment:

# It is great that Computer Science has collaborated with the Philosophy Department to create a course specifically attuned to the needs of this program.

# Standards of Performance at Graduation:

# Adjusted their student performance standard for the indicators to reflect common practice in the discipline (changed from 75% to 70%).

# Data Collection and Presentation:

* Presented data simply and clearly for the faculty and the general public to understand and provided the percentages in all the data tables of students who met the student standards at graduation.

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

# Measures, Rubrics and their Alignment:

# Please include the grading scheme if not rubric is used.

# Standards of Performance at Graduation:

# Last year the program reported that the program standard was that 75% of students had to earn a 75% or better on the various criteria. This year this program standard was not provided, but the percentage of students who met the student standards was very high.

# Use of Assessment Data:

# Please explain why the feedback from last year was not used to make changes.

**Appendix 1: WSCUC “Rubric for Assessing the Quality of**

**Academic Program Learning Outcomes”**

[**http://www.wascsenior.org/search/site/Rubrics%20combined**](http://www.wascsenior.org/search/site/Rubrics%20combined)

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| --- | --- | --- | --- | --- |
| **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: Sacramento State Baccalaureate Learning Goals for**

**The 21st Century & AAC&U’s 16 VALUE Rubrics**

[**http://www.csus.edu/wascaccreditation/Documents/Endnotes/E044.pdf**](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](http://www.aacu.org/value/rubrics/CreativeThinking.cfm) (WSCUC core competency)

3.2 [Information literacy](http://www.aacu.org/value/rubrics/InformationLiteracy.cfm) (WSCUC core competency)

3.3 [Written communication](http://www.aacu.org/value/rubrics/WrittenCommunication.cfm) (WSCUC core competency)

3.4 [Oral communication](http://www.aacu.org/value/rubrics/OralCommunication.cfm) (WSCUC core competency)

3.5 [Quantitative literacy](http://www.aacu.org/value/rubrics/QuantitativeLiteracy.cfm) (WSCUC core competency)

3.6 [Inquiry and analysis](http://www.aacu.org/value/rubrics/InquiryAnalysis.cfm) (Sixth VALUE rubric)

3.7 [Creative thinking](http://www.aacu.org/value/rubrics/CriticalThinking.cfm) (Seventh VALUE rubric)

3.8 [Reading](http://www.aacu.org/value/rubrics/Reading.cfm) (Eighth VALUE rubric)

3.9 [Teamwork](http://www.aacu.org/value/rubrics/Teamwork.cfm) (Ninth VALUE rubric)

3.10 [Problem solving](http://www.aacu.org/value/rubrics/ProblemSolving.cfm) (Tenth VALUE rubric)

1. **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](http://www.aacu.org/value/rubrics/civicengagement.cfm) (Eleventh VALUE rubric)

4.2 [Intercultural knowledge and competence](http://www.aacu.org/value/rubrics/InterculturalKnowledge.cfm) (Twelfth VALUE rubric)

4.3 [Ethical reasoning](http://www.aacu.org/value/rubrics/ethicalreasoning.cfm) (Thirteenth VALUE rubric)

4.4 [Foundations and skills for lifelong learning](http://www.aacu.org/value/rubrics/LifelongLearning.cfm) (Fourteenth VALUE rubric)

4.5 [Global Learning](http://www.aacu.org/value/rubrics/global-learning) (Fifteenth VALUE rubric)

1. **Integrative Learning \*\*, including:** *synthesis and advanced accomplishment* across general and specialized studies.
	1. [Integrative and applied learning](http://www.aacu.org/value/rubrics/integrativelearning.cfm) (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 3: Important Considerations for Program Review & Assessment**

Please keep the following questions in mind when you (program, department, or the college) assess student learning outcomes and improve the programs:

1. What are your program learning outcomes (PLOs): **what should your students know, value, and be able to do (at the time of graduation)?** Arethe PLOs aligned closely with the missions and vision of the university and the college/department/program? Is each program learning outcome aligned closely with the curriculum, the key assignment, pedagogy, grading, the co-curriculum, or relevant student support services?
2. Is each PLO assessable? What **rubrics** are used to assess a particular program learning outcome? What are the explicit **criteria** and **standards of performance** for each outcome? Have you achieved the learning outcomes: **the standards** **near or at graduation**?
3. **What are the data, findings, and analyses for EACH program learning outcome?** **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. Are these PLOs (together with the data and the standards of performance **near or at graduation**) able to demonstrate the **meaning, quality, integrity and uniqueness** of your degree program?
5. **Who is going to use the data**? Are the data, findings, or analyses clearly presented so they are easy to understand and/or use?Is the data used only for the course or for the program where the data is collected, or is the data also used broadly for the curriculum, budgeting, or strategic planning at the department, the college, or the university?
6. **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? Are they widely shared?
7. 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 to improve student learning and success?** If no, what is your plan to assess the effectiveness of those changes?
8. **Is there an assessment plan for each unit (program, department, or college)?** Have curriculum maps been developed? Does the plan clarify when, how, and how often each outcome will be assessed? 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? Will the assessment plan be revised as needed?

**Appendix 4: Relevant Verbs in Defining Learning Outcomes**

(Based on Bloom’s Taxonomy)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Knowledge | Comprehension | Application | Analysis | Synthesis | Evaluation |
| CiteDefineDescribeIdentifyIndicateKnowLabelListMatchMemorizeNameOutlineRecallRecognizeRecordRelateRepeatReproduceSelectStateUnderline | ArrangeClassifyConvertDescribeDefendDiagramDiscussDistinguishEstimateExplainExtendGeneralizeGive ExamplesInferLocateOutlineParaphrasePredictReportRestateReviewSuggestSummarizeTranslate | ApplyChangeComputeConstructDemonstrateDiscoverDramatizeEmployIllustrateInterpretInvestigateManipulateModifyOperateOrganizePracticePredictPrepareProduceScheduleShopSketchSolveTranslateUse | AnalyzeAppraiseBreak DownCalculateCategorizeCompareContrastCriticizeDebate DetermineDiagramDifferentiateDiscriminateDistinguishExamineExperimentIdentifyIllustrateInferInspectInventoryOutlineQuestionRelateSelectSolveTest | ArrangeAssembleCategorizeCollectCombineCompileComposeConstructCreateDesignDeviseExplainFormulateGenerateManageModifyOrganizerPerformPlanPrepareProduceProposeRearrangeReconstructRelateReorganizeRevise | AppraiseAssessChooseCompareConcludeContrastCriticizeDecideDiscriminateEstimateEvaluateExplainGradeInterpretJudgeJustifyMeasureRateRelateReviseScoreSelectSummarizeSupportValue |

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 5: 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]](#footnote-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.

1. Adapted from the information at <http://webapps2.csus.edu/assessment/> [↑](#footnote-ref-1)