



**Feedback for the 2014-2015 Annual Assessment Report**  
**Department of Physics and Astronomy**  
***Physics BS***

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**California State University, Sacramento**



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

**To:** Chair, Department of Physics and Astronomy  
**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](#) prepared by the [Office of Academic Program Assessment](#) (OAPA). The feedback for the *2014-2015 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, 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

### Physics BS

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?	Missing	
	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	"Still in the process of updating Assessment Plan. Collecting data according to old plan was not in our best interest."
	Q1.2.1. Do you have rubrics for your PLOs?	N/A	N/A; "Currently writing them. Draft copies are attached. "
	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)	No	
	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?	N/A	
	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?	Missing	
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):	N/A	
	Q2.2. Has the program developed or adopted explicit standards of performance for this PLO?		
	Q2.3. Please provide the rubric(s) and standard of performance that you have developed for this PLO:		
	Q2.4. Please indicate the category in which the selected PLO falls into.		
	Q2.5. Please indicate where you have published the PLO:		
	Q2.6. Please indicate where you have published the standard of performance:		
	Q2.7. Please indicate where you have published the rubric that measures the PLO:		
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)	No	No skip to end
	Q3.1A. How many assessment tools/methods/measures in total did you use to assess this PLO?	N/A	
	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)		
	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?		

Q3A: Direct Measures (key assignments, projects,	<b>Q3.3.</b> Were direct measures [key assignments, projects, portfolios, etc.] used to assess this PLO? (If No or Don't know, skip to Q3.7)	N/A	
	<b>Q3.3.1.</b> Which of the following direct measures were used?		
	<b>Q3.3.2.</b> Please attach the direct measure you used to collect data.		
	<b>Q3.4.</b> How was the data evaluated? (If No, skip to Q3.5)		
	<b>Q3.4.1.</b> Was the direct measure (e.g. assignment, thesis, etc.) aligned directly and explicitly with the PLO?		
	<b>Q3.4.2.</b> Was the direct measure (e.g. assignment, thesis, etc.) aligned directly and explicitly with the rubric?		
	<b>Q3.4.3.</b> Was the rubric aligned directly and explicitly with the PLO?		
	<b>Q3.5.</b> How many faculty members participated in planning the assessment data collection of the selected PLO?		
	<b>Q3.5.1.</b> If the data was evaluated by multiple scorers, was there a norming process (a procedure to make sure everyone was scoring similarly)?		
	<b>Q3.6.</b> How did you <b>select</b> the sample of student work [papers, projects, portfolios, etc.]?		
	<b>Q3.6.1.</b> How did you decide how many samples of student work to review?		
	<b>Q3.6.2.</b> How many students were in the class or program?		
	<b>Q3.6.3.</b> How many samples of student work did you evaluate?		
	<b>Q3.6.4.</b> Was the sample size of student work for the direct measure adequate?		
Q3B: Indirect Measures (surveys, focus groups, interviews, etc.)	<b>Q3.7.</b> Were indirect measures used to assess the PLO? (If No, skip to Q3.8)		
	<b>Q3.7.1.</b> Which of the following indirect measures were used?		
	<b>Q3.7.2.</b> If surveys were used, how was the sample size decided?		
	<b>Q3.7.3.</b> If surveys were used, briefly specify how you selected your sample.		
	<b>Q3.7.4.</b> If surveys were used, what was the response rate?		
Q3C: Other Measures (external benchmarking, licensing exams, standardized tests, etc.)	<b>Q3.8.</b> Were external benchmarking data such as licensing exams or standardized tests used to assess the PLO? (If No, skip to Q3.8.2)		
	<b>Q3.8.1.</b> Which of the following measures were used?		
	<b>Q3.8.2.</b> Were other measures used to assess the PLO? (If No or Don't Know, skip to Q3.9)		
	<b>Q3.8.3.</b> If other measures were used, please specify:		
Q3D: Alignment and Quality	<b>Q3.9.</b> Did the data, including the direct measures, from all the different assessment tools/measures/methods directly align with the PLO?		
	<b>Q3.9.1.</b> Were ALL the assessment tools/measures/methods that were used good measures for the PLO?		
Q4: Data, Findings, and Conclusions	<b>Q4.1.</b> Please provide simple tables and/or graphs to summarize the assessment data, findings, and conclusions:		
	<b>Q4.1a.</b> Does the program explicitly assess the PLO?		
	<b>Q4.2.</b> Are students doing well and meeting program standard? If not, how will the program work to improve student performance of the selected PLO?		

	<b>Q4.2a.</b> Can the readers come to the <b>SAME</b> conclusion?	<b>N/A</b>	
	<b>Q4.3.</b> Do students partially meet, meet, or exceed the program's standard of performance (Q2.2) <b>based on their</b> assessment data?		
	<b>Q4.3a.</b> Can the readers come to the <b>SAME</b> conclusion as the program that students meet the expectations/standards for this learning outcome?		
<b>Q5: Use of Assessment Data (Closing the Loop)</b>	<b>Q5.1.</b> 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)		
	<b>Q5.1.1.</b> 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		
	<b>Q5.1.2.</b> Do you have a plan to assess the impact of the changes that you anticipate making?		
	<b>Q5.2.</b> How have the assessment data from last year (2013 - 2014) been used so far?		
	<b>Q5.2.1.</b> Please provide a detailed example of how you used the assessment data above.		
<b>Additional Assessment Activities</b>	<b>Q6.</b> 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.). <b>If</b> your program/academic unit has collected data on the program elements, please briefly report your results	<b>Yes</b>	"We have surveys of graduates. They are anonymous via google forms. We review to identify areas of concern from a student perspective."
	<b>Q7.</b> What PLO(s) do you plan to assess next year?	<b>Yes</b>	Written and Oral Communication
	<b>Q8.</b> Have you attached any appendices?	<b>Yes</b>	1) A copy of our updated current assessment plan draft
<b>Summary</b>	<b>S1.</b> Does the program follow the template by answering where applicable?	<b>Yes</b>	
	<b>S2.</b> Were the program's answers simple and clear?	<b>Yes</b>	
	<b>S3.</b> Does the program assess the PLO using correct alignment of standard, rubric, and measure (Q2.3, Q4.1a)?	<b>No</b>	
	<b>S4. Overall,</b> do students partially meet, meet, or exceed program's standard of performance <b>based on consultant's</b> review (Q4.3a)?	<b>No</b>	Nothing to report

\*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 has made progress toward assessing Physics majors' Program Learning Outcomes and is commended for addressing the following areas well:

##### **Assessment plan**

- The Physics Department put together a draft assessment plan that covers analytical reasoning, experimental and computational technical skills, and written and oral communication skills.
- They have developed rubrics with which to assess the above mentioned skills.
- The program has identified places in the curriculum to collect assessment data.

#### Recommendations:

Currently the assessment plan includes more background information than is necessary or useful. An assessment plan should be a thoroughly pragmatic document that states very specifically and explicitly:

- The program learning outcomes in terms of what students should know and be able to do,
- the measures that will be used to track student progress toward these PLOs,
- the program standard of performance for each measure,
- and a specific schedule for carrying out each part of the plan.

Eventually, the assessment plan should be accompanied by a curriculum map that indicates where in the curriculum each PLO is introduced, developed and mastered. Specific recommendations for the assessment plan follow.

##### **Program Learning Outcomes and their Alignment:**

- Separate the justification for the PLO from the PLOs themselves. If the program wishes to include those justifications in the Mission Statement, that might be a more appropriate place for them. Strip the PLOs down to simple statements of what students should know and be able to do.
- Currently the PLOs include discussion of what faculty do and want. The PLOs should be very student-oriented – faculty should not appear in them.
- The most effective PLOs explicitly state what students are expected to be able to do using action verbs. For example, when the PLO states “Students understand...” it is not clear how to measure that understanding. When the PLO states “Students can analyze problems, determine a proper solution path, and correctly compute answers,” it is very clear how that PLO can be measured. We encourage the program to make the PLOs more explicit.
- The current PLOs are quite broad. We encourage the program to expand upon these PLOs by adding subitems to specify what is meant by “Students must be able to share their ideas and work with others in their field” and similarly broad statements.
- The Office of Academic Program Assessment has seen many well-written PLOs from across the campus and is happy to provide examples to help you in this process.

##### **Measures, Rubrics and their Alignment:**

- We commend the program for developing rubrics that measure specific skills. Just as action verbs and explicit descriptions of student performance enhance PLOs, so do they enhance rubrics. For example, in the Analytic Reasoning rubric, the Limitations of Analysis criteria are very clearly and concretely laid out. This will lead to accurate and precise measurement of student learning. Strive to make the other criteria as clearly defined, clarifying what is meant by “understood” or “shows mastery”. The more precisely phrased the rubric, the greater the likelihood that different scorers of a student's work will arrive at the same score.
- Be aware that rubrics usually require a breaking-in and adjustment period. The program may want to pilot the rubrics on a small sample of student work before deploying them on a larger sample.
- Thinking about rubrics often helps focus the PLOs. If you have to define precisely what student performance looks like in a rubric, you are better prepared to revise the PLOs to be more explicit and better aligned with your rubrics.

##### **Standards of Performance at Graduation:**

- Once the PLOs and rubrics are tuned up, you are ready to set a standard of performance for each measurement tool. It is most useful to express the standard of performance as a percentage of students performing at a desired level (e.g., 70% of students will perform at a level of 3 or above on all criteria of the rubric). This is more useful than projecting a desired average, as averages can be affected by outliers and convey less information about the total pattern of student performance.
- It feels very artificial to set a standard of performance at the beginning of assessment efforts, but don't let that stop

you. You can always adjust the standard of performance or the rubric once you have actual assessment data. But it is useful to have a target and to know what that target is.

**Data Collection and Presentation:**

- When you are ready to collect assessment data, consider how you will score the student work. It is preferable to have more than one scorer, but you will need a norming process to calibrate the scorers.
- We commend your choice of embedded assessment – using work that students are already producing. You can reduce the burden on faculty by also building the evaluation of that work into the normal coursework – using the rubrics in your grading process, for example.

**Other Aspects of the Assessment Plan:**

- We suggest that you create a 5-year assessment plan and sort the assessment activities into years, recording that explicit schedule in your assessment plan. Such a schedule adds structure and predictability to program assessment, and ensures an orderly succession should your assessment manager (whether the chair or assessment coordinator) step down.
- A curriculum map indicating where each subitem of your PLOs is introduced, developed, and mastered/assessed will be very helpful in using your assessment data to improve instruction. If you find that students are performing below the desired level in one area, you can track that deficiency back through the curriculum.

The program has made substantial progress from last year. We applaud your efforts to thoughtfully revamp your assessment plan, and encourage you to start gathering assessment data this year.

## Appendix 1: WSCUC “Rubric for Assessing the Quality of Academic Program Learning Outcomes”

<http://www.wascsenior.org/search/site/Rubrics%20combined>

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>

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 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)?** Are the 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
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 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<sup>1</sup>:

**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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<sup>1</sup> Adapted from the information at <http://webapps2.csus.edu/assessment/>