Adopted: December 1,1998

ACADEMIC SENATE
Of
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, CA

AS-SI2-98/PRAIC
RESOLUTION ON
1997/98 PROGRAM REVIEW AND IMPROVEMENT COMMITTEE
REPORT OF FINDINGS AND RECOMMENDATIONS

WHEREAS, The following departments/programs were reviewed during the 1997/98 academic year:

Ethnic Studies Program
Chemistry and Biochemistry
Physics
Psychology and Human Development
Philosophy
Graphic Communication
General Engineering Program
Computer Engineering Program
Business Administration Program (BSBA)
College of Business (MBA)
Construction Management Department
Food Science and Nutrition
Soil Sciences Program;

and

WHEREAS, The Academic Senate acknowledges receipt of the Program Review and Improvement Committee's "Report on programs reviewed during 1997/98"; therefore, be it

RESOLVED: That the Academic Senate receive the Program Review and Improvement Committee's "Report on programs reviewed during 1997/98"; and, be it further

RESOLVED: That the Program Review and Improvement Committee's "Report on programs reviewed during 1997/98" be submitted to the Provost and Vice President for Academic Affairs.

Proposed by: The Academic Senate Program Review and Improvement Committee
Date: October 27, 1998

Cal Poly Memorandum

Date: September 18, 1998

Copies: W. Baker
P. Zingg
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Collegc Deans
Department chairs in programs revie\ved

To: Academic Senate Executive Committee

From: Program Review and Improvement Committee

Subject: Report on programs reviewed during 1997-98

The Academic Senate Program Review and Improvement Committee reviewed 12 programs during the academic year 1997-98. Each program received a Request For Information, based upon the Academic Program Review and Improvement document adopted by the Senate in April 1992. Programs submitted their reports in winter quarter. Based on these, the committee formulated preliminary reports and forwarded them to the programs. We met individually with each program during spring quarter to allow them an opportunity to respond to the preliminary report and to clarify any misunderstandings or misinterpretations. Final reports were then prepared.

Attached is a report summarizing the committee's overall findings, as well as a summary report for each of the programs reviewed. We thank each program for the effort they have put into their reviews

Copies of this report, and any responses from the programs reviewcd, should be placed in the University Library for public access.

Paul Fratessa

Harvey Greenwald

M. Nahvi

Ken Riener

Bianca Rosenthal

Tom Ruehr

George Stanton

Ray Terry

COMMENTS AND RECOMMENDATIONS OF THE PROGRAM REVIEW AND IMPROVEMENT COMMITTEE FOR ACADEMIC PROGRAMS REVIEWED IN THE 1997-98 ACADEMIC PROGRAM REVIEW CYCLE

The rationale and focus of the program review process is solidly integrated with fundamental University policy documents, and is congruent with a wide range of program planning, innovation, and development initiatives. Building on such a body of policy and activities provides a conceptual coherence and shared operational focus, which helps to facilitate and strengthen the overall University effort of continually improving the quality of its programs, especially in terms of the benefits experienced by students in those programs.

In the process of analyzing and evaluating the academic programs on the 1997-98 review cycle, the Program Review and Improvement Committee has identified some general issues common to many of the programs. These issues are noted below, and presented as an attempt to help guide future actions which those programs may wish to undertake.

1. Mission statements. Programs could benefit from constructing mission statements which specify their purpose, focus, and goals more clearly and completely. In particular, the mission statement should indicate how the program incorporates Cal Poly's polytechnic characteristics.

2. Significant observable intended learning outcomes. Many programs seem to need to spend more effort on this issue. For both improvement and accountability purposes, academic programs benefit by declaring clear specific high-priority learning outcomes that its students are intended to attain and be able to demonstrate as a result of participating in that program. Similarly, at the course level, syllabi containing clear descriptions of desired student outcomes benefit the instructional process.

3. Systematic academic program planning Few programs appeared to approach program planning in a rigorous manner, logically linking the program mission statement and significant program goals to levels of outcome attainment, procedural considerations, and appropriate options for dealing with both short-range issues and long-range plans. Perhaps those programs that have effective planning approaches could proVide resources to other programs.

4. Systematic professional consultation regarding instructional design, delivery, and improvement. Most programs lack systematic peer review on instructional issues, per se. Some form of serious professional interaction focusing on this topic would enhance curricular development and instructional effectiveness.

5. Assistance for at-risk students. The percentage of students on academic probation was disturbingly high in many programs. The Committee feels that students benefit greatly when a department has an effective system for early identification of those evidencing marginal academic performance and likely to be placed on academic

probation. Departmental assistance, services, and referrals to specialized resources are more effective when provided earlier than they currently are in most programs.

6. Student feedback for program/course improvement purposes. Programs could benefit from developing a practical and valid system for obtaining student feedback specifically for diagnostic purposes. This would be distinct from traditional summative course evaluations.

7. Obtaining program-relevant feedback from alumni. Most programs' recognized that their contact with alumni was limited and unsystematic. Alumni can be a unique and valuable source of useful feedback in the process of determining program goal attainment, and improving program design and processes.

8. Validity of the program's admission criteria. Most programs seemed to be passive recipients of externally determined admissions criteria. The programs may wish to consider how to become more active in this regard. In any event, programs would benefit from developing a clear definition of student "success," against which the admission criteria could be validated.

The Program Review and Improvement Committee stands ready to assist and collaborate with academic programs as they work towards implementing these general recommendations, as well as the specific recommendations contained in the Committee's response to their individual reports.

Ethnic Studies Program
PROGRAM **REVIEW REPORT**
1997-1998

ITEM	COMMENTS
l. MISSION A. Mission Statement	There is a good mission statement buried in this section.
B. Distinguishing features of mission	Interesting choice of language to describe the notable features of the mission.
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	This section should be rewritten. The outcomes should be recast to indicate the connection with Ethnic Studies. For example, a knowledge and awareness of historical issues is extremely broad as a student outcome. Some of the items listed as skills are not skills. For example, appreciating diversity is not a skill. See Addendum.
2. Outline program content and skill coverage	Program content and skill coverage are covered in the previous section. See Addendum.
3. Co-curricular programs or activities	The Ethnic Studies program is actively involved with a number campus clubs and organizations.
4. Special educational services: a) enterinq students	See Addendum.
b) assistance for at-risk students	See Addendum.
c) Individualized opportunities:	This is not addressed in this section but in Section C.1.a, research projects and publications in the Ethnic Studies journal are listed.
d)General education courses.	See Addendum.
B. Instructional Design and Methods 1. Innovations in traditional courses	The instructional design is not addressed in this section. It is addressed in the next section. Also see Addendum.
2. Other innovative inst. methods	A number of innovative methods are included in the descriptions of the courses.
C, Assessment methods and Data 1. Student Learning Outcomes a) Methods used at course level	There are a number of different assessments used. These have not been tied to specific outcomes.
b)Student Outcome Information	Anecdotal. See Addendum.
c) Program outcome data	See Addendum.
2. Instructional methods a) Peer review of plans and activities	Peer review involves faculty from other departments in CLA. In general, the approach taken to peer review is standard,
b) Incorporating research into instruction	Several courses have been created as a result of scholarly endeavors. Certain courses have also resulted in work that led to publications.
c) General approach to instruction	Incomplete. The response is unclear and should be rewritten to more clearly address the Question.

3. Instructors a) Colleague eval. procedures	An attempt has been made to use a variety of evaluative techniques including visiting each other's classes and serving as guest lecturers.
b) Student eval. of instructors	The evaluation instrument is modeled after the instrument used at UCLA. No data is provided.
4. Program a) Internal Review Process	The department conducts bi-monthly meetings and conducts a yearly retreat at which various issues are addressed. An Ethnic Studies Advisory Committee has been established,
b) Accreditation	There is no accreditation available but an external review would be appropriate.
c) Alumni evaluation	See Addendum.
d) Evaluation by professional advisory board	See Addendum.
e) Comparison with similar programs	The department has done an excellent job of describing the comparison with other programs
f) Internal strategic planning	Strategic planning is integrated with CLA. See Addendum.
111. STUDENT CHARACTERISTICS A. Awards and Honors	Since the Ethnic Studies program has no majors, the data is not easily available. Some attempt to track the Ethnic Studies minors should be made.
B. Placement of graduates	The Ethnic Studies program has no majors.
C. Diversity	The Ethnic Studies program has no majors. Perhaps some data on the minors would be useful.
IV. PROGRAM ADMINISTRATION .A. Faculty Scholarship	The faculty is active professionally.
B. Prof. Development Expectations	The criteria regarding facuity professional development is clear and well stated.
C. Non-faculty	
D. Resources 1. Personnel	The Ethnic Studies Department has five, full-time tenure track allocations. Currently there are only four tenure track faculty due to resiqnations in the department.
2. Fiscal Allocation	The fiscal allocations are presented.
3. Facilities	Adequate.
E. Admissions criteria 1. Admissions profile	Acceptance into the minor requires a 2.75 GPA.
2. Success of criteria	Incomplete. No data were presented.
F. Applicant pool 1. Recruitment	Ethnic Studies minors are recruited from students taking Ethnic Studies courses for GE and USCP requirements.
2. Program Capacity	There are currently 50 students enrolled in the Ethnic Studies minor. See Addendum.
G. Applicants/ accomm./ enrolled	The Ethnic Studies program has no majors.
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	The Ethnic Studies program has no majors.
B. SCU generated	

C. Retention/graduation	The Ethnic Studies program has no majors.
D. **FTEF** used	
VI. **FUTURE** PLANS	The department has a number plans including the creation of an Ethnic Studies major sometime in the future.

Department of Chemistry and Biochemistry
PROGRAM REVIEW REPORT
1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	Emphasis on students is secondary.
B. Distinguishing features of mission	Polymers and coatings concentration responded to needs and promoted industrial connections. Hands-on instrumentation provides effective training for students.
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	Not clear what you intend your students to achieve. what do you expect from small teams? Goals should be expressed in terms of desirable and observable outcomes.
2. Outline program content and skill coverage	
3. Co-curricular programs or activities	Campus student activities have been extended to community service organizations.
4. Special educational services: a) entering students	
b) assistance for at-risk students	Incomplete. How are they helped?
c) Individualized opportunities:	
d)General education courses.	
B. Instructional Design and Methods 1. Innovations in traditional courses	Chemistry studio I innovative with classroom links to the Intemet.
2. Other innovative inst. methods	Emphasis upon the emerging field of computational chemistry.
C. Assessment methods and Data 1. Student leaming Outcomes a) Methods used at course level	
b) Student course outcome data	Incomplete.
c) Program outcome data	Incomplete. Addendum supplied information about numbers of graduates, but not whether graduates had achieved program goals.
2. Instructional methods a) Peer review of plans and activities	
b) Incorporating research into instruction	Strong integration 0 f research with teaching and student poster presentations at meetings.
c) General approach to instruction	Strong faculty emphasis upon education.

3. Instructors a) Colleague eva!. procedures	
b) Student eva!. of instructors	Tracked as an overall department average.
4. Program a) Internal Review Process	
b) Accreditation	
c) Alumni evaluation	What plans to achieve goals? Good alumni contributions.
d) Evaluation by professional advisory board	What plans for industrial contacts?
e) Comparison with similar proqrams	Outstanding "sense of community" among faculty, staff, and students. Concem about need for additional professional development.
f) Intemal strategic planning	What do you plan to do?
III. STUDENT CHARACTERISTICS A. Awards and Honors	
B. Placement of graduates	What about industry placements?
C Diversity, dean's list, AP	
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	
B. Prof. Development Expectations	
C. Non-faculty staff involvement	Good to see active involvement of the technical staff.
D Resources 1. Personnel	Some faculty have minimal professional development achievements.
2. Fiscal Allocation	
3. Facilities	Instrumentation facilities are excellent. Studio classroom is innovative.
E. Admissions criteria 1. Admissions profile	Uses College MCA scheme for freshman. Transfers not discussed.
2. Success of criteria	Exemplary model for assessing success of admissions criteria. Are you planning some follow through on this? What are the best predictor variables to use?
F. Applicant pool 1. Recruitment	
2. Program Capacity	
G. Applicants/ accomm./ enrolled	
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	
B. SCU generated	

C. Retention/graduation	
D. FTEF used	
VI. FUTURE PLANS	Plans for new building and additional instrumentation are noted. The external review recommended supporting faculty time on senior research. How successful has this been in the past? What plans do you have to implement this with enhanced research agendas by all faculty?

Department of Physics
PROGRAM REVIEW REPORT, 1997-1998
Note: Evaluation was hampered by failure of Department to follow outline of Request for Information.

ITEM	COMMENTS
I. MISSION A. Mission Statement	Mission is stated clearly. It serves three distinct audiences.
8. Distinguishing features of mission	Objectives are similar to those of other leading physics departments across the nation, with more emphasis on serving three distinct group of students (physics maiors, service courses, GE courses).
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	Desired outcome varies with the audience. The desired outcomes would be more cleany and usefully explained by reference to observables and behaviors.
2. Outline program content and skill coverage	It outlines program contents and skill coverage for 8.S. in physics and 8.S. in physical sciences. No minor in physics is available. A proposal expected by the end of the academic year. Two concentrations are available to physics students. The report needs to incorporate information on how the courses are suited to the needs of non-physics majors
3. Co-curricular programs or activities	No co-curricular program is described. Extracunicular opportunities for students are listed, e.g., students research.
4. Special educational services: a) entering students	Physics majors are assigned a physics faculty advisor.
b) assistance for at-risk students	See addendum.
c) Individualized opportunities:	Excellent individualized opportunities are described through out the report.
d)General education courses.	GE courses are offered
8. Instructional Design and Methods 1. Innovations in traditional courses	Hands-on science course and studio physics are described. What is being done to address the concems of the Visiting Committee (report of March 17, 1997) on lack of innovative pedagogy in some courses.
2. Other innovative inst. methods	
C. Assessment methods and Data 1. Student Leaming Outcomes a) Methods used at course level	Homework, exams, and lab reports are primary methods used at course level.
b) Student course outcome data	Incomplete. Information about the degree to which particular significant outcomes are attained is lacking, However, in Fall 1997 percentage of students on Dean's list decreased and academic probation increased. What happened?
c) Program outcome data	

2. Instructional methods a) Peer review of plans and activities	See addendum.
c) General approach to instruction	
b) Incorporating research into instruction	
c) General approach to instruction	
3 Instructors a) Colleague eval. procedures	No formal colleague evaluation system.
b) Student eva!. of instructors	Graph of overall instructor rating is given for all physics department courses in Fall 97 is qiven.
4. Program a) Internal Review Process	Not clear
b) Accreditation	No accrediting body.
c) Alumni evaluation	See addendum.
d) Evaluation by professional advisory board	Report of Visiting Committee had good suggestions on curriculum.
e) Comparison with similar programs	On par with similar programs, but no specific data included.
f) Internal strategic planning	Plan of 1997.
III. STUDENT CHARACTERISTICS A. Awards and Honors	For a small-size department the list is impressive.
8. Placement of graduates	Graduates are placed in industry and in graduate schools.
C. Diversity	It has expanded to considerable level during the last five years
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	Impressive.
B. Prof. Development Expectations	Space limitation in Building 52. Zero travel budget for faculty. What is being done?
C. Non-faculty staff involvement	
D. Resources 1. Personnel	
2. Fiscal Allocation	Resources are needed. Are there any efforts made to acquire new lab equipment and computers?
3. Facilities	Lab equipment is needed. What is being done?
E. Admissions criteria 1. Admissions profile	

2. Success of criteria	Transfer students do not fare well. See addendum.
F. Applicant pool 1. Recruitment	No active effort by department. See addendum.
2. Program Capacity	Enrollment has increased from 70 in 93-96 to 80 in 1997.
G. Applicants/ accomm.l enrolled	In 1997 the ratio of applicants/ accommodated/ enrolled was 88/61/17. Active recruiting is needed to increase the show rate.
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	12.38 to 15.25 units in Fall 1997,
B. SCU generated	
C. Retention/graduation	See addendum.
D. FTEF used	
VI. FUTURE PLANS	New strategic plan is developed. Tactics for achieving the goals are not described.

____Psychology and Human Development _Program
PROGRAM REVIEW REPORT
1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	
B. Distinguishing features of mission	Good, clear description.
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	The first four cognitive outcomes, as described, indicate knowledge domains, and are too vague/general to clearly specify just what is desired to be demonstrated by students. ("Independence ..." may be more accurately classified as a behavioral, or even attitudinal, outcome.) Please provide important examples of observable/ measurable ways in which students are expected to demonstrate competence in these domains.
2 Outline program content and skill coverage	Good overall description.
3. Co-curricular programs or activities	
4. Special educational services: a) entering students	
b) assistance for at-risk students	How much tutoring actually occurs?
c) Individualized opportunities:	Given the program's research emphasis, more activity in this area seems appropriate.
d)General education courses.	
B. Instructional Design and Methods 1. Innovations in traditional courses	
2. Other innovative inst. methods	
C. Assessment methods and Data 1. Student Learning Outcomes a) Methods used at course level	Videotaped counseling sessions are a good evaluation technique. A wide variety of methods are used. The matrix presentation is exemplary (p. 21-23).
b) Student course outcome data	Self-perceptions. No objective data for important outcome attainment.
c) Program outcome data	Good alumni feedback.
2. Instructional methods a) Peer review of plans and activities	No data summary. Is a teaching philosophy statement required?
b) Incorporating research into instruction	
c) General approach to instruction	Good general description.

3. Instructors a) Colleague eva!. procedures	Incomplete. Procedures are clear, but summary is not provided.
b) Student eva!. of instructors	Information from only two courses per year does not seem frequent enough to assess teaching performance.
4. Program a) Intemal Review Process	The Area Representatives' Council is a good idea. However, it appears to be reactiv.e, and without a systematic review agenda.
b) Accreditation	MS Psych pre-accreditation site visitor seemed concerned with gaps in content. Regarding evaluation of new undergraduate programs, why wait several years to get feedback? It seems that early intensive outcomes measurement would be especially valuable in a new program
c) Alumni evaluation	
d) Evaluation by professional advisory board	
e) Comparison with similar programs	
f) Intemal strategic planning	Informal, reactive process, but the program seems to be able to react quickly to the feedback received.
III. STUDENT CHARACTERISTICS A. Awards and Honors	Student co-authorships impressive, but few other awards cited.
B. Placement of graduates	
C. Diversity, dean's list, AP	
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	Professionally active faculty.
B. Prof. Development Expectations	Well-written document of professional development expectations.
C. Non-faculty staff involvement	Minimal--student assistants only.
D. Resources 1, Personnel	
2. Fiscal Allocation	Small travel budget for the number of tenure-track faculty.
3. Facilities	Generally good facilities, but the loss of Child Development lab sounds like a serious loss.
E. Admissions criteria 1. Admissions profile	
2. Success of criteria	
F. Applicant pool 1. Recruitment	
2. Program Capacity	
G. Applicants/ accomm.l enrolled	Highly competitive.

V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	
B. SCU generated	
C. Retention/graduation	Retention/Graduation appears to be good.
D. FTEF used	
VI. FUTURE PLANS	Greater alumni contact is a good idea.

Philosophy_Program
PROGRAM REVIEW REPORT
1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	The mission statement is a general statement that does not address the specific mission of the program at Cal Poly. The mission statement would be appropriate for any philosophy program at almost any university. The Philosophy Department has included background material in this section. There is a reference to Westem culture but no reference to other cultures.
B. Distinguishing features of mission	Interestingly written.
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	They have started with the leaming outcome categories from Visionary Pragmatism.
2. Outline program content and skill coveraqe	They have described the program coverage but not the skill coverage, How modem is the program? See addendum.
3. Co-curricular programs or activities	They state that there are no co-curricular programs as such for students in the philosophy major but they do describe the Cal Poly Philosophy Club in Section 4.a.
4. Special educational services: a) entering students	Two faculty advisors provide advising for all philosophy majors. The role of other faculty members as well as peer advising by students could be expanded.
b) assistance for at-risk students	The assistance to academically at-risk students seems minimal. In view of the percentage of students on probation (See Page 18.), perhaps some proactive methods could be implemented.
c) Individualized opportunities:	They have listed only senior project and The Cal Poly Philosophy Club.
d)General education courses.	They have an extensive list of general education courses.
B. Instructional Design and Methods 1. Innovations in traditional courses	Pedagogy is highly traditional. There appears to be a limited effort by some to use different pedagogical techniques and formats.
2. other innovative inst. methods	See comments above.
C. Assessment methods and Data 1. Student Leaming Outcomes a) Methods used at course level	Student learning outcomes are measured in traditional ways including oral and written evidence, and in examinations. The section involved a general discussion of assessment as opposed to a discussion of course-specific outcomes.
b) Student course outcome data	There is no student course outcome data presented.
c) Program outcome data	There is no program outcome data presented. The future plans of the department may address this issue.

2. Instructional methods a) Peer review of plans and activities	There appears to be little formal peer review of instructional activities.
b) Incorporating research into instruction	A number of faculty members have introduced research activities into courses.
c) General approach to instruction	There is no common approach to instruction in the department. How modem are the approaches?
3. Instructors a) Colleague eval. procedures	The peer review policies and procedures appear to be standard.
b) Student eval. of instructors	The average student evaluations of instructors are nearly a point higher than the average evaluations of the courses. The evaluation instrument is limited to two questions. Perhaps a more comprehensive instrument could be considered.
4. Program a) Internal Review Process	The department chair could have benefited from a committee which would have had responsibility for the internal review.
b) Accreditation	An external review has been conducted and the report was attached. There were a number of very good suggestions in the report.
c) Alumni evaluation	The major program is still new and as a result there has been no alumni evaluation. The future plans of the department may address this issue.
d) Evaluation by professional advisory board	There are no formal procedures for obtaining evaluations from the American Philosophical Association nor from any departmental advisory board.
e) Comparison with similar programs	The concentration in Ethics and Society is unique within the CSU..
f) Intemal strategic planning	There are no intemal departmental strategic planning procedures. There is a need for a more formal and systematic process.
III. STUDENT CHARACTERISTICS A. Awards and Honors	The department has no formal procedures for acquiring or keeping records of extemally awarded competitive honors. One student has been honored by the college and another has been President of Mortar Board.
B. Placement of graduates	A number of graduates have done extremely well. Several have received graduate fellowships while others have done well in law school. However, there is no formal tracking of majors.
C. Diversity	Gender and diversity among the students is excellent.
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	The quality of the faculty is high, although some faculty are more active than others.
B. Prof. Development Expectations	The criteria and standards for faculty professional development are clearly stated and generally very good.
C. Non-faculty staff involvement	There are no non-faculty staff integrated into the instructional activities of the department.
D. Resources 1. Personnel	A list of faculty is provided. The faculty appears adequate to meet its needs.
2. Fiscal Allocation	See addendum.
3. Facilities	There are no special facilities under the control of the department.
E. Admissions criteria 1. Admissions profile	Standard admissions criteria.

2. Success of criteria	The percentage of students on AP is much higher than the percentage on the Dean's list. In 1996 36.7% were on AP, while only 5% were on the Dean's list.
F, Applicant pool 1. Recruitment	The department could do more to improve the quality and the quantity of the students who enroll in the program.
2. Program Capacity	There are approximately 70 majors.
G. Applicants/ accomm.l enrolled	In 1997, 55 students applied, 27 were accommodated, and only 8 enrolled. See the comments under IV.F.1 above.
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	The numbers appear to be highly variable. This might due to the small number of majors in the program.
B. SCU generated	
C. Retention/graduation	Not yet available.
D. FTEF used	
VI. FUTURE PLANS	The department has a number of issues that it expects to address including faculty recruiting and assessment.

Graphic Communication Department
PROGRAM REVIEW REPORT
1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	Mission statement is a bit vague and cautious
B. Distinguishing features of mission	These are notable features of the department and its performance. Notable features of the mission may be inferred from statements made in this section.
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	The academic program, its goals and achievements, and intended student outcomes are described in general terms. Grounding the outcomes in behavioral terms is needed to clarify them.
2. Outline program content and skill coverage	
3. Co-curricular programs or activities	Strong interaction with other programs(5 units from Art and Design department, 11 units from computer science).
4. Special educational services: a) entering students	
b) assistance for at-risk students	Service is minimal.
c) Individualized opportunities:	Impressive array.
d) General education courses.	
B. Instructional Design and Methods 1. Innovations in traditional courses	These are impressive methods and activities which can transform traditional courses. Some belong to B2.
2. Other innovative inst. methods	See comments above.
C. Assessment methods and Data 1. Student Learning Outcomes a) Methods used at course level	
b) Student course outcome data	Incomplete.
c) Program outcome data	Incomplete. Information and comments obtained from sources listed in C.1.c are very important in assessing program outcome. Neither examples of surveys nor data are given.
2. Instructional methods a) Peer review of plans and activities	No information is given on what is done with the results of peer review. It appears to be the minimum.
b) Incorporating research into instruction	Applied research finds its way into instruction.
c) General approach to instruction	It appears that this question is misunderstood. The description given enumerates supplementary approaches to instruction.

3. Instructors a) Colleague eva!. procedures	Standard method.
b) Student eva!. of instructors	No information is given on the extent of evaluation. Who gets evaluated and how often? How are results oresented or used?
4. Program a) Internal Review Process	Weekly meetings of the faculty appears to be the main vehicle for review (intemal or external)
b) Accreditation	There is no accrediting body in the field
c) Alumni evaluation	No formal procedure.
d) Evaluation by professional advisory board	No formal evaluation by a professional society or departments advisory board. The advisory board seems to input their views to the faculty directly.
e) Comparison with similar programs	No other BS program in graphic communication in westem US. Cal Poly program excels in integrating theory and practice (more interdisciplinary). No comparison is made with the 70 programs across the nation.
f) Internal strategic planning	Incomplete.
III. STUDENT CHARACTERISTICS A. Awards and Honors	Awards and honors are significant. Clear and detailed information is given
B. Placement of graduates	Data is concise and includes stratification by gender. It doesn't indicate an alumni tracking.
C. Diversity	Reference is made to APR report. (More females than males)
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	This is section is well done. It follows Cal Poly strategic plan. Some of the material in this section is professional development.
B. Prof. Development Expectations	Some of the material in this section is faculty scholarship. This section and the previous section out together give the overall picture.
C. Non-faculty staff involvement	Incomplete. This question is apparently interpreted in relation to visiting instructors only The Professor-From-Industry-Program is described but no data is given on the extent of its effect on courses, units, hours of instruction, and the overall quality of the program. No information is provided on the staff and how they may be contributing to the program.
D. Resources 1. Personnel	Eight full professors (joined 1966-87). One probationary Assistant professor (joined in 1998). Brief cv's are given. Strong Cal Poly influence. What are the long-term plans for recruiting new faculty?
2. Fiscal Allocation	Actual dollars spent in areas such as professional development, some equipment, and promoting program's goals. No data is given on funds made available to the department by the College of Liberal Arts or the university.
3. Facilities	Laboratory facilities are described. They appear to be excellent.
E. Admissions criteria 1. Admissions profile	Incomplete. The response does not describe criteria for admission to the program. Is College of Liberal Arts' MCA model used? Does the program have its own criteria?
2. Success of criteria	Validity would be determined in reference to intended outcomes.
F. Applicant pool 1. Recruitment	The department has active recruiting.

2. Program Capacity	Enrollment has been around 280 since 1993. What is the optimum size under present constraints. What are the caps based on I) labs, ii) faculty?
G. Applicants! accomm.l enrolled	
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	
B. SCU generated	
C. Retention/oraduation	Mostly graduate in 5 or 6 years.
D. FTEF used	
VI. FUTURE PLANS	Strateoic plannino is under way.

_____General Engineering _Program
PROGRAM REVIEW REPORT
1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	Statement too vague, not focused. A clear focus would let incoming students know what to expect from the proQram.
B. Distinguishing features of mission	What specific features are notable from other schools? some of the features listed belonQ in different cateQories
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	Objective measurable outcomes are limited. "Engineering judgment" on page 4 is not an accepted synonym for attitudes. These goals should be expressed in terms of desirable and observable outcomes.
2. Outline program content and skill coveraQe	A sampling of the courses that a GE student takes should be proviced
3. Co-curricular programs or activities	
4. Special educational services: a) entering students	There seems to be a wide variety of services available.
b) assistance for at-risk students	At-risk students are advised pro-actively.
c) Individualized opportunities:	Provide some examples.
d)General education courses.	None offered.
B. Instructional Design and Methods 1. Innovations in traditional courses	A wide array is provided.
2. Other innovative inst. methods	
C. Assessment methods and Data 1. Student Leaming Outcomes a) Methods used at course level	Striving to link with the ABET Criteria 2000 is good. Instrument is described (pp. 7-8). You have an impressive instrumentation array.
b) Student course outcome data	Incomplete. Please provide data.
c) Program outcome data	Incomplete. Can you provide data from the surveys?
2. Instructional methods a) Peer review of plans and activities	
b) Incorporating research into instruction	
c) General approach to instruction	Incomplete. Where are the electives coming from? How do they fit into the GE curriculum?

3. Instruetors a) Colleague eval. procedures	Standard RPT process.
b) Student eval. of instructors	GE Program has no faculty of its own. Standard student survey from is used. Please provide example
4. Program a) Intemal Review Process	The program is reviewed by the College Curriculum Committee and the College Council.
b) Accreditation	Curricula in the program are delivered by programs that are accredited. GE is not.
c) Alumni evaluation	
d) Evaluation by professional advisory board	No report is provided.
e) Comparison with similar proQrams	
f) Internal strategic planning	Is there a fonnal plan and procedure?
III. STUDENT CHARACTERISTICS A. Awards and Honors	Specifics on awards (years awarded) would be helpful.
B Placement of graduates	Can you tabulate this information?
C. Diversity, dean's list, AP	
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	Not applicable.
B. Prof. Development Expectations	Not applicable.
C. Non-faculty staff involvement	Not applicable.
D. Resources 1. Personnel	Not applicable.
2. Fiscal Allocation	Incomplete.
3. Facilities	Incomplete. Please provide information about these issues.
E. Admissions criteria 1. Admissions profile	MCA model.
2. Success of criteria	Incomplete.
F. Applicant pool 1. Recruitment	Highly competitive program,
2. Program Capacity	Incomplete.
G. Applicants/ aceomm./ enrolled	See table IV and V.
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	
B. SCU generated	
C. Retention/graduation	
D. FTEF used	
VI. FUTURE PLANS	These are exciting prospects. Have plans, procedures, and implementation dates been formulated?

Computer Engineering Program
PROGRAM REVIEW REPORT
1997-1998

ITEM	COMMENTS
I, MISSION A, Mission Statement	The statement is a little vague,
B. Distinguishing features of mission	This helps to clarify I. A.
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	The listing of outcome areas is somewhat vague. Please list clearly what you consider to be the most significant desired student outcomes. These should be objectively observable; i.e., be prepared to show that your students actually attain the outcomes you seek to produce. Completion of course sequences with a passing grade does not constitute evidence of clearly defined student outcomes, nor does a description of the program as a center infiuenced by intellectual, physical and social factors. The Addendum provides some outcome specification drawn from the Co-op survey. The department needs to do this for itself.
2. Outline program content and skill coveraQe	See Addendum.
3. Co-curricular programs or activities	There is a wide array of co-curricular activities.
4. Special educational services: a) entering students	The items listed are standard.
b) assistance for at-risk students	A pro-active role is taken to assist at-risk students.
c) Individualized opportunities:	Co-ops and summer intemships are adequate to fulfill this requirement.
d)General education courses.	The GEB requirements for CPE students are noteworthy. CPE evidently does not provide GEB at this time. See Addendum.
B. Instructional Design and Methods 1. Innovations in traditional courses	CPE seeks to incorporate the latest technology in CPE courses and to provide increased access to computer workstations.
2. Other innovative inst. methods	The EMSE program involved integration of diverse course material, team teaching and cooperative leaming techniques. Is the program ongoing or defunct?
C. Assessment methods and Data 1. Student Learning Outcomes a) Methods used at course level	CPE seeks feedback on courses involving heavy use of labs and design projects.
b) Student course outcome data	CPE measures the progress of its students through the results of three capstone courses: CPE 219/259; CPE 315; and CPE 461/462/463. See Addendum. However, what evidence do you have that these courses fulfill their intended function?
c) Program outcome data	CPE conducts an alumni survey, an industry survey, and a report from students returning from a co-op experience. See Addendum.
2. Instructional methods a) Peer review of plans and activities	The report cites classroom visitations, student evaluations and consideration of tests and materials distributed to students. No mention is made of a formal plan required of facutty.

b) Incorporating research into instruction	CPE faculty conduct in-house research projects. There are also projects supported by 3Com, NSF and HP. Labs use state-of-the-art technoloQY. See Addendum.
c) General approach to instruction	CPE is an interdisciplinary program stressing hands-on learning, team teaching, oral presentations, studio classrooms, applied research projects, etc. Is there any overall pedagogical philosophy of which these methods are a part?

3. Instructors a) Colleague eva\. procedures	Faculty are evaluated for research, publications and generated external funding.
b) Student eva\. of instructors	Student evaluations are conducted in more than the minimum required number of courses. The report asserts that a copy of the Student Evaluation Questionnaire is attached. It was included in a separate binder not available to the PRAIC as a whole. We noted a great variation in the student evaluation averages over the five-year period. How has CPE reacted to this variation? Do you know what caused it?
4. Program a) Internal Review Process	Curriculum matters involve many advisory groups. A copy of the Program Governance Document was included in a separate binder not available to the committee as a whole.
b) Accreditation	A copy of ABET's 1996-1997 Final Report was provided in a separate binder not available to the committee as a whole. While the report had some suggestions for improvement for the School of Engineering, it was entirely positive with reqard to CPE.
c) Alumni evaluation	An alumni survey form is on CPE's website.
d) Evaluation by professional advisory board	The CSC and EE Industrial Advisory Board evaluates the CPE program at semi-annual meetings. No written report is provided.
e) Comparison with similar programs	Incomplete. The report claims that Cal Poly's CPE is more interdisciplinary than other CPE programs. The report also claims that Cal Poly's CPE program is a jointly sponsored program by two separate departments is a distinguishing feature. How about a comparison of required courses, of innovative teaching techniques, etc.? A clearer definition of what interdisciplinary means needs to be given. In what ways is the CPE student's course experience interdisciplinary?
f) Internal strategic planninQ	A copy the the CSC and EE Strategic Program Documents should be provided.
III. STUDENT CHARACTERISTICS A. Awards and Honors	The information is provided in a grouped data format. Can you cite students by name, year, scholarship and amount?
B. Placement of Qraduates	The report claims that 25% of CPE graduates go to graduate school after findinQ employment. See Addendum.
C. Diversity	
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	A broad definition of scholarship includes refereed research, contract research, private consulting, textbook writing, innovative applications of educational technology. The statement made about "appropriate professional activity" seems to undercut the criteria stated in the same sentence? Are there any criteria other than the ones listed on p. 10 (Item IV.A)? See Addendum.

B. Prof. Development Expectations	A broad definition of professional development includes mentoring at the student {junior faculty level, academic committee work, student organization participation, conference participation, grant writing and publication.
C. Non-faculty staff involvement	The clerical and technical staff of CSC and EE can meet the needs of the CPE program.
D. Resources 1. Personnel	The partial resumes included provide an excellent description of the faculty (12 pages of the 25 page report).
2. Fiscal Allocation	Some discussion of the amounts indicated would be helpful in assessing whether funding is a problem. Cash donations to the ePE discretionary fund appear to be increasing, but equipment donations are erratic.
3. Facilities	Exisitng facilities are adequate to meet the needs of the program.
E. Admissions criteria 1. Admissions profile	CPE students require a higher MCA score to be admitted than EE or CSC only.
2. Success of criteria	CPE students receive higher grades in courses they take with ese and EE majors.
F. Applicant pool 1. Recruitment	Every effort is made to attract and retain highly qualified diverse students.
2. Program Capacity	CPE, CSC and EE have a combined capacity of 1600 students.
G. Applicants! accomm./ enrolled	
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	
B. SCU generated	
C. Retention/graduation	
D. FTEF used	
VI. FUTURE PLANS	The problem of changing the cuniculum to meet rapid changes in the discipline itself is something which most subject areas do not have to deal with.

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PROGRAM REVIEW REPORT
Business Administration Program (BSBA)
1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	
B. Distinguishing features of mission	Five clear facets: (1) emphasis on practical application; (2) use of small groups/team projects; (3) computer applications; (4) case studies; (5) interdisciplinary analysis.
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	Scope of content coverage in the cognitive domain seems credible. However, it would be helpful to be more specific about important ways in which students are expected to demonstrate their understanding/knowledge in the content domains listed, since there is no common consensus regarding the definitions of such terms as to understand," and "knowledge of." Those terms themselves are not specific enough to denote what would constitute objective evidence of understanding or knowledge. Desired outcomes in the social domain are relatively clear. In the attitude/value outcome domain, "appreciation or is too ambiguous to focus outcome assessment. More specific descriptions would be helpful, such as "hold in high esteem," "respect," "tolerate" etc
2. Outline program content and skill coverage	The integrated core is an impressive innovation. Beyond issues of program administration, instructional design, and implementation, insofar as the program's validation and justification rest on evidence for its impact on studentleaming, it would be helpful to provide fuller descriptions of those intended outcomes than to "foster an interdisciplinary outlook...solve problems from a generalist approach...promote integrated systems and thinking," or to attain "increased leaming."
3. Co-curricular programs or activities	With such a large number of clubs (25), program outcomes might be facilitated if at least some of the clubs focused on them.
4. Special educational services: a) entering students	Advising Center seems exemplary, as does the Student Services Office.
b) assistance for at-risk students	
c) Individualized opportunities:	
d) General education courses,	
B. Instructional Design and Methods 1. Innovations in traditional courses	The examples provided are substantial in terms of focus and potential potency for enhancing desired program outcomes. Their effects should be carefully assessed.
2. Other innovative inst. methods	
C. Assessment methods and Data 1. Student Learning Outcomes a) Methods used at course level	
b) Student course outcome data	Data is not provided from Mgt. 414, or any other courses.

c) Program outcome data	Note that a matrix of content-coverage by course does not constitute a method of program outcome assessment. Rather, it relates to category I!.A.2., above.
2. Instructional methods a) Peer review of plans and activities	
b) Incorporating research into instruction	Information on page 31 describes research areas, not how such research is incorporated into instructional activities.
c) General approach to instruction	

3 Instructors a) Colleague eva!. procedures	As described on page 16, and in the addendum, the criteria seem exemplary, if conscientiously applied.
b) Student eva!. of instructors	Procedure seems exemplary.
4. Program a) Intemal Review Process	
b) Accreditation	
c) Alumni evaluation	
d) Evaluation by professional advisory board	
e) Comparison with similar proQrams	Survey provided in addendum is exemplary. Extraordinary detail!
f) Intemal strategic planning	Seems exemplary. More detail might be helpful in guiding other proQrams in this activity.
III. STUDENT CHARACTERISTICS A. Awards and Honors	
B. Placement of Qraduates	
C Diversity	
IV. PROGRAM ADMINISTRAnON A. Faculty Scholarship	Definition of 'scholarship' can be inferred from the COB Evaluation & Reward Guidelines provided as an addendum.
B. Prof. Development Expectations	Individually determined.
C. Non-faculty staff involvement	
D. Resources 1. Personnel	However, time base, service activities, and consultation activities are not described
2. Fiscal Allocation	
3. Facilities	
E. Admissions criteria 1. Admissions profile	
2. Success of criteria	
F. Applicant pool 1. Recruitment	
2. Program Capacity	

G. Applicants/ accomm.l enrolled	Significant drop in percentage of applicants accommodated noted in 1997.
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	
B. SCU generated	
C. Retention/graduation	
D. FTEF used	
VI. FUTURE PLANS	

PROGRAM REVIEW REPORT
COLLEGE OF BUSINESS (MBA)
1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	
B. Distinguishing features of mission	
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	Although the desired "intellectual" outcomes need to be more clearly specified (see the comments for this topic in the COB BS review), the other types of outcomes seem clear enough to convey a useful enough description to indicate, if still generally, where to look for demonstrations of competent outcome achievement. Nevertheless, greater specificity in terms of behavioral indicators would still be helpful and useful.
2. Outline program content and skill coverage	
3. Co-cunicular programs or activities	
4. Special educational seNices: a) entering students	
b) assistance for at-risk students	
c) Individualized opportunities:	
d)General education courses.	
B. Instructional Design and Methods 1. Innovations in traditional courses	Page 37
2. Other innovative inst. methods	
C. Assessment methods and Data 1. Student Leaming Outcomes a) Methods used at course level	
b) Student course outcome data	Although summary program evaluation may need to wait until program completion (see page 36), it is still advisable and appropriate to engage in diagnostic and formative evaluation via assessment of program sub-objectives and other "en route" indications that student competencies (and "sub-competencies") are developing as intended.
c) Program outcome data	Year-end computer-based simulation seems exemplary, as does the "informal transcript". (p.38) Although the instruments presented in Exhibits II & III provide a credible range of fairly clearly specified topics, student self-perceptions of learning are not equivalent to objective assessment of performance in those areas.
2. Instructional methods a) Peer review of plans and activities	

b) Incorporating research into instruction	
c) General approach to instruction	
3. Instructors a) Colleague eva!. procedures	
b) Student eval. of instructors	
4. Program a) Internal Review Process	
b) Accreditation	
c) Alumni evaluation	
d) Evaluation by professional advisory board	
e) Comparison with similar programs	Exhibit IV
f) Internal strategic planning	
III. STUDENT CHARACTERISTICS A. Awards and Honors	
B. Placement of graduates	
C. Diversity	
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	
B. Prof. Development Expectations	
C. Non-faculty staff involvement	
D. Resources 1. Personnel	
2. Fiscal Allocation	
3. Facilities	
E. Admissions criteria 1. Admissions profile	
2. Success of criteria	
F. Applicant pool 1. Recruitment	
2. Program Capacity	

G. Applicantsl accomm./ enrolled
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load
B. SCU generated
C. Retention/graduation
D. **FTEF** used
VI. FUTURE PLANS

Construction Management Department

PROGRAM REVIEW REPORT
1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	The second paragraph does not belonQ to the mission.
B. Distinguishing features of mission	See addendum.
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	Incomplete. The intended leaming outcomes were not addressed (Visionary Pragmatism report); should state (or Cognitive: a. Competence in basic fields, such as . . . b. Ability to solve, analyze, or synthesize problems. Behavioral and Attitudinal: a. Professionalism b. Teamwork Performance, Procedural and Physical Skills: a. Oral, written, and visual communications. Social Outcomes not emphasized: Team approach contradicts your statement social outcomes not emphasized
2. Outline program content and skill coverage	Explain interdisciplinary components with Architectural Engineering Department. Capstone course seems good. Is individual senior proiect required?
3. Co-curricular programs or activities.	None offered, why? Design projects?
4. Special educational services: a) entering students	Summer advising, WOW Week. Academic progress is monitored thru database.
b) assistance for at-risk students	Advising, counseling.
c) Individualized opportunities:	1. Cooperative education program 2. Student exchange programs-intemational. Suggested: Senior Project? Involvement with faculty's research projects.
d) General education courses.	General education courses? None listed.
B. Instructional Design and Methods 1. Innovations in traditional courses	Innovations noted: -Group Projects in the fourth-year labs ·Distance Learning techniques to students on Co-Op Team-teaching for multi-disciplinary subjects? Technology in instruction? Use construction related software (See Accred. RepOrt p. 15).
2. Other innovative inst. methods	

C. Assessment methods and Data 1. Student Learning Outcomes a) Methods used at course level	See Accred. Report p. 15 See 4.f.-Strategic Planning; short ·shelf life" Project evaluation and oral presentations. Students in Co-Op keep a journal.
b) Student course outcome data	Incomplete. Response referred to course evaluation, not outcomes assessment.
c) Program outcome data	Surveys of graduating seniors, alumni and employers. Certified Professional Constructor I exam-only one student has taken it so far. See addendum.
2. Instructional methods a) Peer review of plans and activities	Review occurs in an informal manner during periodic review of course wor!< at faculty meetings. What are some significant outcomes produced by this procedure? (Redesign . . . implementation . . .) See addendum.
b) Incorporating research into instruction	No faculty research (See Accred. Report p. 15)
c) General approach to instruction	Incomplete. What they have should go to C.1 .a.
3. Instructors a) Colleague eval. procedures	RPT only; no quantitative data. See addendum.
b) Student eval. of instructors	See addendum.
4. Program a) Internal Review Process	Does catalog revision cycle equal internal review process? Is Review Committee made up of all faculty?
b) Accreditation	Accredited by the American Council for construction Education. ABET?
c) Alumni evaluation	Provide sample results of responses.
d) Evaluation by professional advisory board	You are to be congratulated on your panel.
e) Comparison with similar programs	See addendum.
f) Internal strategic planning	Short "shelf life" assumption could be reconsidered.
III. STUDENT CHARACTERISTICS A. Awards and Honors	See addendum.
B. Placement of graduates	Placement of graduates near 100%.
C. Diversity	
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	Credible criteria.
B. Prof. Development Expectations	Expectations are vague. Individual professional development plan is not reQuired.

C. Non-faculty staff involvement	
D. Resources 1. Personnel	
2. Fiscal Allocation	See addendum.
3. Facilities	
E. Admissions criteria 1. Admissions profile	MeA points system (calculus, physics, GE and business classes).
2. Success of criteria	Incomplete. No empirical data--how is performance measured?
F. Applicant pool 1. Recruitment	No special efforts. What were the previous efforts that produced no discemible results (i. e., diversity)?
2. Program Capacity	
G. Applicants! accomm.lenrolled	
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	
B. SCU generated	
C. Retention/ Qraduation	
D. FTEF used	
VI. FUTURE PLANS	Not specific enough in terms of reaching its goals. Plans to diversify curriculum with new concentrations, but how will these affect program? (See p. 16 of accreditation report.)

_____Food Science and Nutrition Program

PROGRAM REVIEW **REPORT**

1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	Narrowly vocational. Consider expanding the scope of the mission beyond that focus. Pemaps begin with some of the concepts presented in I. B. as well as incorporating polytechnic characteristics, contribution to society, preparation for lifelong learning, etc.
B. Distinguishing features of mission	
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	Detailed and comprehensive, but not prioritized; not much on social responsibility, except for discussion of economically-disadvantaged families. Terms such as "become familiar with" imply a superficial treatment.
2. Outline program content and skill coverage	Exemplary exposition of program skill and content coverage. Seems concise and clear.
3. Co-curricular programs or activities	Wide variety of activities, including WIC, Head Start, Senior Nutrition. A matrix of "Intended student outcomes" and these activities would be helpful.
4. Special educational services: a) entering students	
b) assistance for at-risk students	Approach is remedial, rather than proactive.
c) Individualized opportunities:	Interesting projects cited, but no indication of what percentage of students participate in these projects. Is "individualization" promoted?
d)General education courses.	
B. Instructional Design and Methods 1. Innovations in traditional courses	Exemplary presentation. Assessment of level of attainment of expected outcomes is the next step.
2. Other innovative inst. methods	Note that only fourth and fifth points are instructional innovation. Dialog teaching especially seems potentially effective.
C. Assess. meth. & Data 1. Student Learning Outcomes a) Methods used at course level	Includes some very infonmative methods, e. g., s written evaluation of students by clients, pretest and post-test, case studies are good, community service.
b) Student course outcome data	Examples from addendum are informative.
c) Program outcome data	Pass rate high for Registered Dietitian exam. Examples from addendum are infonmative.

2. Instructional methods a) Peer review of plans and activities	Department is redesigning this process.
b) Incorporating research into instruction	Several good examples cited. This looks like a good way to incorporate research into instruction.
c) General approach to instruction	Discussion mixes intended outcomes and methods. Applied, ethical issues incorporated. It appears that the approach is (a) emphasize basic skills and knowledge through tabs etc., (b) synthesize through problem solving, etc., (c) mentoring by faculty. is this accurate?
3. Instructors a) Colleague eval. procedures	Department is redesigning this process.
b) Student eva!. of instructors	New form looks good; recommend more frequent use.
4. Program a) Intemal Review Process	We recommend developing a systematic approach to this issue.
b) Accreditation	External review documentation needs to be made available.
c) Alumni evaluation	Although many contacts are made, a systematic process for obtaining program evaluation information is needed.
d) Evaluation by professional advisory board	Priorities and details of Advisory Board evaluation process should be made available.
e) Comparison with similar programs	Comparison points seem credible.
f) Internal strategic planning	seems to be a good start on strategic planning. Vigorous progress on this issue is encouraged.
III. STUDENT CHARACTERISTICS A. Awards and Honors	
B. Placement of graduates	
C. Diversity, Dean's list, AP	Percentage of FdSci on AP seems high.
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	Department is redesigning this process.
B. Prof. Development Expectations	
C. Non-faculty staff involvement	
D. Resources 1. Personnel	

2. Fiscal Allocation	
3. Facilities	Information from addendum is informative.
E. Admissions criteria 1. Admissions profile	Criteria seem to be reasonable.
2. Success of criteria	Methodology is exemplary.
F. Applicant pool 1. Recruitment	Good plan. Full implementation is encouraged.
2. Program Capacity	

G. Applicants/ accomm./ enrolled	
V. INSTITUTIONAL STATISTICS A. Fall auarter Student load	
B. SCU generated	
C. Retention/graduation	Relatively low 5-year graduation rate(?)
D. **FTEF** used	
VI. FUTURE PLANS	Wish list, no large vision of where they would like to be.

Soil Sciences Program
PROGRAM REVIEW REPORT
1997-1998

ITEM	COMMENTS
I. MISSION A. Mission Statement	Mission Statement has 6 points and seems clear and complete. goals and objectives which follow are misplaced and would be better contained in other sections. The committee could not understand the 5th item of the mission statement: ....to promote the integrity of the department.•
B. Distinguishing features of mission	Incomplete.
II. INSTRUCTIONAL ISSUES A. Educational Goals 1. Intended student outcomes	Many intended student outcomes are contained in section I and would be better organized under this section. The four courses used as demonstrations of learning outcomes are excellent and clear. It would be helpful to have the broad goals listed first and the correlated with the specifics which were presented.
2. Outline program content and skill coverage	The description of the concentrations is good. The material on curriculum and constraints seems to be a planning matter and belong in strategic ptanninq. See appendix 1 of report.
3. Co-curricular programs or activities	See addendum
4. Special educational services: a) entering students	The letter of welcome to accommodated students is good. Follow-up calls from the faculty can also be used to promote the department.
b) assistance for at-risk students	the at-risk student approach seems good. See addendum.
c) Individualized opportunities:	Student assistantships, supply set ups, grading, tutoring, student clubs, Soil Science student advancement group, intemships, research assistants are all mentioned. Student senior projects are not mentioned.
d)General education courses.	Soil Science 121 is F.2. offering.
B. Instructional Design and Methods 1. Innovations in traditional courses	The basic innovation appears to be the application of lecture material to laboratory and presentation materials. the library, the Web, professional joumals and classroom resources are used.
2. Other innovative inst. methods	None listed.
C. Assessment methods and Data 1. Student Leaming Outcomes a) Methods used at course level	lt would have been helpful if the leaming outcomes listed in this section had been integrated into the goals and objectives listed on pages 2 and 3 and then used as a measure of assessment of attainment of goals. The methods of assessment listed are clear.
b) Student course outcome data	For senior level courses the ratios of grades getween courses seems extreme. It would be expected that seniors would have a higher grade average than lower level classes. Other evidence beyond grade distributions would be helpful in assessing whether this is symptomatic of another problem.
c) Program outcome data	The comments under b. above would apply and bring to question the success of lhe program at achieving desired learning outcomes, if a large percentage of the students are not attaining acceptable grades in their senior classes.

2. Instructional methods a) Peer review of plans and activities	There is no mention of the goals and objectives being addressed as part of the process. How are these goals and objectives attained through the curriculum process?
b) Incorporating research into instruction	The statements on the relationship of research to classroom seem appropriate. The listing of grants and professional development awards do not specifically indicate how those grants are aiding student leaming
c) General approach to instruction	The statement is fine but it is also general. Elsewhere in the document there are bits and pieces of the general approach but this section is meant to bring forward a specific statement of pedagogy which could be more descriptive than the brief statement presented See addendum.

3. Instructors a) Colleague eval. procedures	The statement is somewhat vague and it is not clear whether there is a basis for evaluation that is clear to the faculty being evaluated as well as the evaluation team. See addendum.
b) Student eval. of instructors	The form looks comprehensive. The statement that the faculty receive high overall scores brings to question what the standard of measure is and against what is it measured?
4. Program a) Internal Review Process	This seems to relate to the comments on page 7 and represents an excellent intemal assessment process. How often is this assessment carried out?
b) Accreditation	there does not appear to be an accrediting body for soil sciences. II has been 8 years since the last review was made. A program of external review should be established and coordinated with the university program review process.
c) Alumni evaluation	See addendum.
d) Evaluation by professional advisory board	The program has an advisory panel.
e) Comparison with similar programs	The data represented support the statement that the program is the largest of a selected number of regional institutions in the country.
f) Internal strategic planning	
III. STUDENT CHARACTERISTICS A. Awards and Honors	There is a list of students who have received honors but it is not clear if that list is comprehensive and what effort is made to collect the data.
B. Placement of oraduates	Very little data is presented on the placement of students.
C. Diversity, dean's list, AP	The data on academic accomplishments or probation indicate a high percentage (over 20%) of the program's students are on academic probation. This may correlate with the comments under II. C. 1.
IV. PROGRAM ADMINISTRATION A. Faculty Scholarship	This section follows the University definitions and is well done. Effective teaching performance addresses teaching skills but not learning outcome success.
B. Prof. Development Expectations	Evidently all faculty develop a professional plan. A copy of an example would be a nice addition to this report. It is not clear how often these plans are reViewed and whether they are used as a measure of achievement. Much of section B duplicates material in A. It is assumed that these listings are a measure of what is contained in the professional development plans.
C. Non-faculty staff involvement	Adequate description. It is noted that there is an administrative assistant rather than a department secretary.

D. Resources 1. Personnel	We note that 3 of the 8 faculty are not certified. Is there a departmental goal to change this if in fact this is significant? Seven of the 8 faculty members are fu11 professors. Is there a plan to integrate assistant and associate professors into the program? There is a wide disparity in the level of professional activity (grants, consulting, publications, presentations) of various members of the faculty. The proqram could benefit if all faculty were professionally active.
2. Fiscal Allocation	See addendum.
3. Facilities	See addendum.
E. Admissions criteria 1. Admissions profile	
2. Success of criteria	The statement about measuring student success by their performance in upper division seems to be relevant to earlier comments conceming the rate of failure in certain upper division courses. See addendum. the data on employment is incomplete in that it does not give the type of employment so that success in placement of students in the profession can be measured.
F. Applicant pool 1. Recruitment	The program is apparently the largest department of its kind in a regional university, but it is evidently not impacted. The data also indicate that only 18% of the students who enter the program actually graduate in it. The recruiting effort seems well organized but the depth of the poot is unclear.
2. Program Capacity	Some discussion of what the current enrollment is would be helpful, as would a discussion of what constrains capacity. The program capacity should be related to student demand and depth of the pool of applicants.
G. Applicants! accomm./ enrolled	See addendum.
V. INSTITUTIONAL STATISTICS A. Fall quarter Student load	
B. SCU generated	
C. Retention/graduation	
D. FTEF used	See addendum.
VI. FUTURE PLANS	Future plans include added faculty and remodeled facilities. the demand for these additions and improvements was not established in the body of the report.

State of California
Memorandum

RECEIVED

JAN 22 1999

Academic **Senate**

CAL POLY

SAN LUIS OBISPO
CA 93407

To: Myron Hood
Chair, Academic Senate

Date: January 15, 1999

From: Warren J. Baker
President

Copies: P. Zingg, D. Conn

Subject: Response to Academic Senate Resolution AS-512-98/PRAIC-Resolution on 1997/98 Program Review and Improvement Committee Report of Findings and Recommendations

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I am pleased to approve this Resolution and to acknowledge the findings of the Program Review and Improvement Committee. The Committee's findings will be summarized and forwarded to the CSU Chancellor's office. In addition, I understand it is the Provost's intention to continue to meet with the faculty of the programs which have been reviewed during the Winter and Spring Quarters to emphasize the value of internal reviews and to discuss the recommendations within the reviews.

Please express my appreciation to both the Academic Senate and the members of the Senate's Program Review and Improvement Committee for their efforts.