

Adopted: January 25, 2000

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

AS-532-00IPRAIC
RESOLUTION ON
1998/99 PROGRAM REVIEW AND IMPROVEMENT COMMITTEE
REPORT OF FINDINGS AND RECOMMENDATIONS

- 1 WHEREAS, The following departments/programs were reviewed during the 1998/99
2 academic year:
3 Physical Education and Kinesiology
4 Manufacturing Engineering
5 Landscape Architecture
6 Journalism
7 Industrial Technology
8 Industrial Engineering
9 Engineering MS
10 Environmental Horticultural Science
11 Dairy Science
12 BioResources and Agricultural Engineering
13 Agricultural Systems Management
14 Art & Design
15 Agricultural Education and Communication;
16
17 and
18
19 WHEREAS, The Academic Senate acknowledges receipt of the Program Review and
20 Improvement Committee's "Report on programs reviewed during 1998/99";
21 therefore, be it
22
23 RESOLVED: That the Academic Senate receive the Program Review and Improvement
24 Committee's "Report on programs reviewed during 1998/99"; and, be it further
25
26 RESOLVED: That the Program Review and Improvement Committee's "Report on programs
27 reviewed during 1998/99" be submitted to the Provost and Vice President for
28 Academic Affairs.

Proposed by: The Academic Senate Program
Review and Improvement Committee
Date: October 19, 1999

Cal Poly Memorandum

Date: September 27, 1999

Copies: W. Baker
P. Zingg
D. Conn
College Deans
Department chairs of
programs reviewed

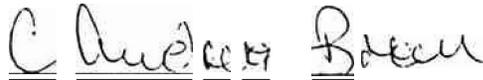
To: Academic Senate Executive Committee

From: George Stanton, Chair,
Program Review and Improvement Committee

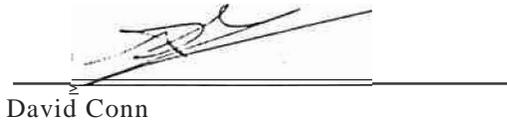
Subject: Report on programs reviewed during 1998-99

The Academic Senate Program Review and Improvement Committee reviewed 12 programs during the 1998-99 academic year. Each program received a standardized 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. The Committee then formulated preliminary reports and forwarded them to the programs. We met individually with each program during spring quarter to provide an opportunity for them to respond to the preliminary report, to clarify any issues, and to provide additional information as addenda to their reports. The committee then developed its final report for each program.

Attached is a report summarizing the Committee's overall findings, as well as the final program reports. We thank each program for the effort they have put into this review process.



Andrea Brown



David Conn



Nana Farkye



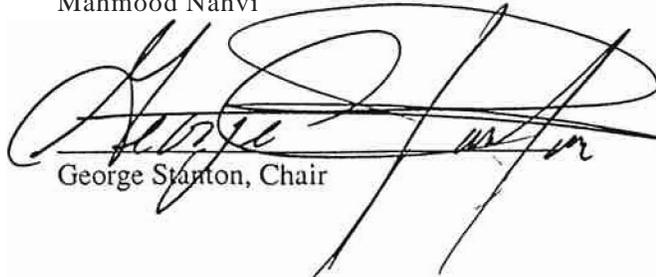
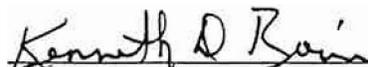
Paul Fratessa

see attached fax

Krystl Honda



Mahmood Nahvi



George Stanton, Chair

Cal Poly **Memorandum**

Date: September 27, 1999

Copies: W. Baker
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To: Academic Senate Executive Committee

From: George Stanton, Chair.
Program Review and Improvement Committee

Subject: Report on programs reviewed during 1998-99

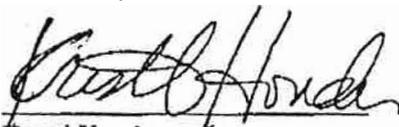
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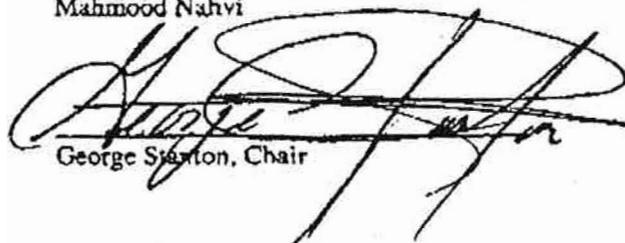
Krystl Honda

Ken Riener

David Conn

Paul Fratessa

Mahmood Nahvi



George Stanton, Chair

**SUMMARY COMMENTS AND RECOMMENDATIONS
OF THE
PROGRAM REVIEW AND IMPROVEMENT COMMITTEE
FOR
PROGRAMS REVIEWED IN THE 1998-1999 CYCLE**

In the process of reviewing the academic programs scheduled for this annual cycle, the Program Review and Improvement Committee identified some general issues common to many of the programs. These observations are noted below, and are presented in an attempt to help direct future efforts which the Committee believes may benefit the programs reviewed, as well as the University as a whole. Many of these issues correspond to those previously identified in prior program review cycles. In accordance with the *program improvement* aspect of its function, the Committee also stands ready to assist and collaborate with academic programs as they work towards implementing these general recommendations, as well as any other endeavors intended to facilitate the attainment of their particular educational goals.

1. Mission statements. Programs were asked to provide their existing mission statements, not to provide one adhering to specific criteria. However, these statements were very general and vague for most programs. So much so that they did not serve as very useful or accurate descriptions of the academic function of the programs, or as a conceptual foundation from which programs' intended impacts on their students logically emerged. Moreover, they did not specifically articulate the program's role within a polytechnic institution. Also, many of the mission statements included unrelated information about program structure and/or operation. The Committee recognizes that, if the development of a program mission statement is to be taken seriously as a helpful component of internal program review, criteria and guidelines need to be developed for constructing such a statement, after which time those statements can be evaluated more objectively in terms of the quality of their compliance with those criteria,
2. Specification of significant intended student learning outcomes. This continues to be a major concern. Programs will benefit from confronting this issue and developing much more explicit descriptions of their most valued expected effects on their students. Such articulation is critical for determining the appropriateness of the method(s) used to assess student achievement and learning, and serves other purposes as well (e.g., accountability, policy development, program improvement, assessing instructional effectiveness, providing critical information for the University at large, etc.).
3. Student feedback and instructional evaluation. Most programs evidenced poor instrumentation and process in this regard. The Committee feels that academic programs invariably benefit from designing a valid practical system for obtaining student feedback in this area. Programs are urged to take this matter more seriously by investing suitable effort in improving this essential and critical source of information about program effectiveness.

4. Rigorous peer review specifically focusing on instructional processes. Most programs simply embed this activity within the standard RPT process. A recommendation offered to most programs was that they focus more specifically, emphatically, and frequently on this topic, given its clear and fundamental importance in the educational process. Systematically doing so should enhance curricular development and instructional effectiveness.
5. Internal review process and strategic planning. Most programs reported what seemed to be a relatively perfunctory process/procedure in this regard. This is another area where it would be helpful to have some practical and effective models available as resources.
6. Alumni feedback. Few programs appeared to obtain this in any systematically rigorous manner. Most information was anecdotal, obtained under non-standardized informal circumstances, and surveys, if used, were rather rudimentary. There was little follow-up with non-respondents, so any conclusions were based on only a small proportion of self-selected respondents.
7. Instructional theory. There was widespread recognition that, while instructors may be experts in their subject matter, many are relatively unfamiliar with psychological learning theory, pedagogical theory and principles, and general concepts of instructional design. Most descriptions of curricular rationale and approach to instruction invoked little more than variants of simple-to-complex sequencing and some amount of application of abstract concepts (in the "learn by doing" tradition). Programs need to be convinced of the value of a more sophisticated approach to instruction, including some articulated theory of instruction based on realistic understanding of the complexities of the human learning process.
8. Instructional integration of co-curricular activities. Although most programs reported notable amounts of co-curricular opportunities and activity, few seemed to integrate these activities in any systematic manner designed to take further advantage of those experiences.
9. Student advising issues. Despite some instances of good practice, most programs evidenced only traditional, even minimal, assistance explicitly targeting entering students. Assistance for at-risk students was generally reactive vs. proactive, and did not seem to confront the problem aggressively. Since techniques in this realm are relatively well known, the issue is basically one of program priorities and corresponding resource allocation, and programs are urged to reconsider the level of their commitment in this regard.
10. Instructional innovation. Although there were some excellent examples of creative and innovative approaches to instruction, this topic seemed to be a relatively low priority for most programs reviewed. Programs are urged to reconsider this issue seriously, and to align their resource allocation, as well as their expectations and rewards for professional development, with any enhanced commitment to designing and investigating the effects of innovative instructional processes.

PROGRAM REVIEW REPORT

Physical Education and Kinesiology

1998-1999

I. MISSION

ITEM	COMMENTS
A. Mission Statement	Definition of kinesiology assists in an understanding of the report. Intended student learning and competency outcomes may be inferred from the statewide mission. The Cal Poly program's mission focuses on job placement and providing seNice courses.
B. Distinguishing Features of Mission	One of the few statewide CSU mission statements. The material presented in this section of the report pertains to section II.CA.e.

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	No learning outcomes are identified. However, the program states that it is "...in the process of working on this," and is encouraged to proceed apace. The competencies presented in Appendix A are clear statements of knowledge/behavior domains, and form a strong basis for the development of intended outcomes when appropriate behavioral indicators are identified.
2. Outline program content and skill coverage	A rationale for the curricular structure and sequence is not provided. Course sequencing not indicated. (Flow charts would be helpful.) Course work for both undergraduate and graduate programs is clearly identified. Notable curricular features are identified (e.g., science courses, professional activity courses, extensive fieldwork, students' professional activities, and the Aquatics Certificate Program). Notable features of "science" courses are not noted. This issue could be clarified by listing the prerequisites for the department course. Also, this might be a potential arena for interdisciplinary or integrative course design, and the program is encouraged to explore this option. The only innovative courses noted are those offered in the Teachina Concentration.
3. Co-curricular programs or activities	The extensive activities of three of the four clubs are clearly connected to the mission and curriculum, and are described in considerable detail. Suggest considering explicit and systematic connections between these activities and course learning objectives.
4. Special educational seNices: a) entering students	Many features appear to be in place to assist entering and continuing students.
b) assistance for at-risk students	The only service mentioned specifically for at-risk students is the Dean's letter and corresponding advisor notification triggered by the student's academic probation/disqualification status. Suggest considering a more proactive and extensive range of assistance.
c) individualized opportunities:	There appears to be an <i>exemplary</i> range of opportunities for the students to engage in fieldwork, and to participate in the research and professional activities of the faculty.
d) General education courses.	The department does reach out to offer seNice classes to the university at large, e.g., Health Education, Aquatics, and other degree programs.

<p>B. Instructional Design and Methods</p> <p>1. Approach to instruction</p>	<p>Good rationale for the applied approach. Suggest developing additional documentation describing just how the emphasis on developing "reflective strategies" is supported by the instructional approach.</p>
<p>2. Pedagogical theory</p>	<p>Specification of references is helpful in support of the brief description of the program's accepted theoretical approach.</p>
<p>3. Other innovative instr. methods</p>	<p>An <i>exemplary</i> and usefully organized array of non-traditional instructional methods is presented in Appendix B. However, the rationale and intended effects of these methods are not described, and the program is strongly encouraged to develop such documentation as a reference and resource, as well as a guide to evaluating the effectiveness of such methods.</p>
<p>4. Incorporating research into instruction</p>	<p>Most of this sort of activity seems to occur in the Aquatics specialization. The program is encouraged to broaden this aspect of the curriculum to include other specializations/concentrations.</p>
<p>C. Assessment methods and Data</p>	<p>There appears to be an impressive array of assessment strategies used in the program. (Also see the "Assessment Strategies" section of Appendix S.) The problem lies with the lack of specific identified learning outcomes to be linked directly to the assessment process. When the program's specification of desired outcomes is completed, they will need to be explicitly associated with the appropriate assessment tools.</p>
<p>1. Student Learning Outcomes</p> <p>a) Methods used at course level</p>	<p>The information provided refers to only a few of the possible learning outcomes. Certification is commendable, but is not necessarily course related.</p>
<p>b) Student course outcome data</p>	<p>The program is commended and strongly encouraged in its intention to develop a systematic approach to undertake a quantitative assessment of the attainment of its "to be written" outcomes.</p>
<p>c) Program outcome data</p>	<p>Apparently the program does nothing specifically in this regard beyond what is included on this topic in the overall RPT process. (The material presented in this section pertains to section II.C.3.a.)</p>
<p>2. Instructional design</p> <p>a) Peer review of plans and activities</p>	<p>The survey in the Commercial Corporate Fitness and Health Promotion program appears to address this issue. However, the program is aware that more needs to be done on this topic, and is encouraged to obtain this kind of information more directly and more often.</p>
<p>b) Student feedback on instruction design/activities</p>	<p>Procedures seem to engage the whole faculty and are comprehensive and commendable.</p>
<p>3. Instructors</p> <p>a) Colleague eval. procedures</p>	<p>The evaluation form is rather rudimentary. Suggest developing a more suitably sophisticated instrument.</p>
<p>b) Student eval. of instructors</p>	<p>Recommend developing a more elaborate systematic review process -- current practice seems relatively perfunctory. Suggest including information from sources other than the faculty.</p>
<p>4. Programs</p> <p>a) Internal Review Process</p>	<p>Recent actions appear to address student needs in terms of flexibility.</p>
<p>b) Accreditation</p>	<p>Despite the absence of formal accreditation, the program presents information regarding how it employs appropriate external criteria to evaluate various program facets, and has initiated its own external review process, the report from which is included. These activities are commendable. Moreover, the External Review Report (see Addendum) provides a rich source of suggestions and observations which the program is encouraged to consider thoroughly. In future external review undertakings, the program is directed to the Academic Senate resolution regarding guidelines for external review for programs not subject to external accreditation.</p>
<p>c) Alumni evaluation</p>	<p>The formal survey in the Commercial Corporate Fitness and Health Promotion program appears to address this review component, and the obtained data indicate a high degree of satisfaction with the program.</p>
<p>d) Evaluation by professionals and advisory board</p>	<p>The other program facets appear to have minimal external input.</p> <p>The program does not have an advisory board.</p>

e) Comparison with similar programs	Very informative information.
f) Internal strategic planning	The CSU-wide collaboration seems to be a unique procedure. However, the program is encouraged to consider a more sophisticated and explicit strategic planning process than simply relying on an annual retreat.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	
B. Placement of Graduates	The 52% of students tracked by Career Services seem to be very active in the professional field. Recommend serious attempts be made in tracking the other 48%.
C. Student diversity, Dean's List, and AP status	The department is in line with the College and university regarding this factor.

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	Although the statements in this section are rather general and hypothetical, the program's scholarship criteria seem clearly implied, as well as quite flexible in the scholarship areas other than that of teaching. Information about the actual standards employed would help to clarify this program feature. Comments on this topic on pages 12-13 of the External Review Report also identify issues and concerns germane to this topic, and provide/imply some suggestions for helpful developments in this area.
B. Prof. Development Expectations	The program's professional development <u>expectations</u> are not clear, as distinct from its scholarship criteria.
C. Non-faculty Staff Involvement	A wide range of experts assist in the activity program, and this is commendable. Having a training class for graduate assistants is a commendable feature, which might serve as an example of good practice for other programs. Suggest investigating the effectiveness of that class, as well as evaluation information for the courses taught by those graduate assistants.
D. Resources	Faculty seem very active.
1. Personnel	Suggest developing a matrix of the faculty information requested in this section. Such a matrix would provide a ready reference for the program, and would be more concise and easier to interpret than the collection of vitae in Appendix K.
2. Fiscal Allocation	
3. Facilities	Labs are outstanding. Does fiscal allocations allow for adequate maintenance? Outdoor facilities appear to be limited
E. Admissions Criteria	
1. Admissions profile	
2. Success of criteria	Approach is appropriate. Program is encouraged to pursue the use of its to-be-defined desired competencies and outcomes in defining student success and validating its admission criteria.
F. Applicant Pool	Program is encouraged to consider applying more effort in this area.
1. Recruitment	
2. Entering student characteristics	Statistics seem appropriate.
G. Program Capacity	
1. Current capacity	
2. Capacity/enrollment ratio	

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	
D. FTEF used	The implications and impact of the volunteer faculty are not clear.

VI. FUTURE PLANS

A. Specifically focused plans	The detailed list presented should provide a useful reference and benchmark for future developments.
B. Anticipated external impacts	Although the report provided no information in this category, discussion with the program indicated that it could benefit by greater reciprocity and integration with other programs in its College, and the program is encouraged to work towards that end.

.Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Manufacturing Engineering

1998-1999

I. MISSION

ITEM	COMMENTS*
A. Mission Statement	Narrowly focused on job placement. Instructional methods are mentioned, but the program is encouraged to consider also mentioning important intended student learning outcomes in discipline-related domains.
B. Distinguishing Features of Mission	Although a general distinction is drawn between this program and the Industrial Engineering Program, information is not provided regarding how this program's mission is distinct from other similarly oriented programs. (The material presented relates to section IIC4e.)

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	Desired cognitive outcomes are rather well expressed, giving a sense of just what the program tries to do with its students. The intended outcomes in the other three categories are almost identical to those of the Industrial Engineering Program, and several are classified incorrectly (e.g.: "understanding of..." and "knowledge of..." are cognitive, not attitudinal or social outcomes; "ability to recognize issues..." is a cognitive, not a procedural/behavioral outcome).
2. Outline program content and skill coverage	Material presented is virtually identical to that presented in the report for the Industrial Engineering Program. See the PR&IC's comments on this section in response to that report.
3. Co-curricular programs or activities	Other than noting that "research projects in IME 241 encourage participation in the SME, it is not clear how the SME is <i>"integrated"</i> into the curriculum. With the exception of reference to the SME, the material presented is virtually identical to that presented in the report for the Industrial Engineering Program. See the PR&IC's comments on this section in response to the Industrial Engineering Program report.
4. Special educational services: a) entering students	Range and nature of services to <i>entering</i> students is exemplary! Recruitment and assistance to entering students are presented together.
b) assistance for at-risk students	Range of advising services for all students is exemplary. The interview of out-transfers would seem to be a source of especially valuable program feedback. Of special note is the Mentor Program, which is encouraged to consider just what evidence might be gathered regarding its actual effectiveness. Also, perhaps at-risk students could be identified prior to receiving their probationary warning.
c) individualized opportunities:	Although the range of opportunities seems standard, level of participation is inferred to be quite high. The description is qualitative. No numerical or quantitative data are given, and such information would give a clearer picture of the degree to which students actually do take advantage of these opportunities.
d) General education courses.	How significant is this component of the program? How many external students enroll in these courses?
B. Instructional Design and Methods 1. Approach to instruction	The program's particular approach to Lab instruction is described in useful detail. However, the instructional approach used by <i>lectures</i> to "build a foundation of engineering principles beneath the process experience gained in the laboratories" needs to be explained in more detail if it involves anything much more than didactic expostulation by the instructor.

2. Pedagogical theory	Exemplary explication! The next step would be to consider what information could systematically be obtained to support these theoretical assumptions.
3. Other innovative instr. methods	An exemplary, but single, example. Does the program employ other innovative instructional methods?
4. Incorporating research into instruction	The faculty employ extensive informal integration of their research experiences into the instructional flow. In reacting to student responses to instructional tasks, instructors routinely draw from their investigations and research, and strive to apply that knowledge to provide realistic applications and to enhance conceptual understanding.
C. Assessment methods and Data	Exemplary presentation.
1. Student Learning Outcomes	
a) Methods used at course level	
b) Student course outcome data	Information not provided. Needed is evidence and information about students' attainment of the program's significant intended outcomes as identified in II.A.1. (Perhaps the documents cited on p.11 could provide the kind of information requested in this section.)
c) Program outcome data	Good potential noted in this area. Perhaps senior projects can provide evidence indicating students' levels of performance related to the program's objectives. Although alumni surveys will only provide subjective perceptions of outcome attainment, the planned exit exam should be an excellent objective source of program outcome attainment. and its careful design is strongly encouraged.
2. Instructional design	
a) Peer review of plans and activities	Review <i>specifically</i> of faculty's instructional plans and design appears only as embedded in the broader context of standard RPT processes. (Material presented in this section pertains to section IIC3a.)
b) Student feedback on instruction design/activities	Rudimentary instrumentation. A sharper and broader focus specifically on instructional design issues is encouraged.
3. Instructors	
a) Colleague eval. procedures	
b) Student eval. of instructors	Suggest developing items to contain a more specific focus on a broader range of issues.
4. Programs	
a) Internal Review Process	Allusions to TOM notwithstanding, the actual process is not clearly described.
b) Accreditation	
c) Alumni evaluation	Extensive alumni feedback instrument and exemplary processing.
d) Evaluation by professionals and advisory board	
e) Comparison with similar programs	
f) Internal strategic planning	Exemplary process, clearly and simply described, including focus on specific criteria.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	
B. Placement of Graduates	Professional employment data are missing. The recent alumni feedback instrument contains related items, so placement information should be at least available for the sample of alumni responding.
C. Student diversity, Dean's List, and AP status	

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	Promulgating the specific criterion of curricular development is a logical and commendable extension of the program's character and instructional approach.
B. Prof. Development Expectations	Information not provided.
C. Non-faculty Staff Involvement	
D. Resources	Exemplary presentation of faculty information.
1. Personnel	
2. Fiscal Allocation	See Addendum. However, information is not provided regarding the amount of assigned time, and its purpose. for each faculty.
3. Facilities	Details of upgrading plan are given. Interesting discussion of sources of funding.
E. Admissions Criteria	
1. Admissions profile	
2. Success of criteria	Suggest that the program begin looking " ..into the relationship between learning outcomes and the admissions criteria."
F. Applicant Pool	Seems exemplary.
1. Recruitment	
2. Entering student characteristics	No information/discussion regarding notable characteristics of entering students.
G. Program Capacity	Not specified.
1. Current capacity	
2. Capacity/ enrollment ratio	Not specified. Presented material relates to section IIIC.

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	No quantitative information is provided.
D. FTEF used	

VI. FUTURE PLANS

A. Specifically focused plans	Suggest that attention be devoted to this issue. A program as new as this one might be expected to have some serious and vigorous specific plans, and some of these might be expected to legitimize its independent identity and separation from the Industrial Engineering Program. For example, since recruitment of well-qualified applicants is a self-identified issue, this program would be expected to do more, and do some things differently, than what the Industrial Engineering Program does in this regard.
B. Anticipated external impacts.	

Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate. and about which no particular observations, evaluations. or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Landscape Architecture

1998-1999

I. MISSION

ITEM	COMMENTS
A. Mission Statement	The Addendum provides a useful explanation of how, in general, the program is intended to impact its students.
B. Distinguishing Features of Mission	Information presented in the report, and in the Addendum, explains distinctive features of the program and how it operates, but does not discuss distinctive features of the program's mission.

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	The A & B level items in this section are general goals. Although clear as discrete areas of concern, they are ambiguous in terms of observable indicators of student learning outcomes. However, the program is currently engaged in curricular development, including the process of identifying and describing significant observable student characteristics/outcomes that would exemplify attainment of its intended goals. The program is to be commended for its explicit engagement with this helpful activity. (Note that the "objectives" presented are for the <u>design</u> of the program, with the exception of item f, and possibly item L)
2. Outline program content and skill coverage	Information presented is exemplary in clarity and format. Also see Addendum for additional comments on this topic.
3. Co-curricular programs or activities	See the Appendix for comment on the Sigma Lambda Alpha mentoring/tutoring function.
4. Special educational services: a) entering students	See Addendum for information regarding the special attention/services provided for entering students.
b) assistance for at-risk students	Curriculum advising seems systematic and exemplary, as befits a highly structured program with sequential requirements. Information about assistance for at-risk students is provided in the Addendum. Might student achievement levels be flagged as systematically as course scheduling and progress?
c) individualized opportunities:	See Addendum for examples of individualized student learning experiences other than internships.
d) General education courses.	Also see Addendum.
B. Instructional Design and Methods 1. Approach to instruction	Hierarchical, simple-to-complex approach, with increasingly individualized annual application projects.
2. Pedagogical theory	The "integration" level seems clearly implied in the curricular design. The Addendum provides commentary regarding the "discovery" and the "exploration" levels.
3. Other innovative instr. methods	The design studio is emphasized. The Addendum provides additional information about the degree to which this experience explicitly builds on and actually realizes the opportunities for integrating specific areas of previously acquired knowledge, in addition to work on application projects that are independently pre-detined or spontaneously generated.

4. Incorporating research into instruction	Faculty seem credibly active in this regard, with interdisciplinary projects covering a wide range of types of activity.
C. Assessment methods and Data	The Addendum provides additional useful information about the criteria employed in the studio critiques.
1. Student Learning Outcomes	
a) Methods used at course level	
b) Student course outcome data	The Addendum provides commentary on this topic. The program is currently working on this issue, and is strongly encouraged in this endeavor.
c) Program outcome data	See Addendum.
2. Instructional design	The daylong quarterly course review session is exemplary practice.
a) Peer review of plans and activities	
b) Student feedback on instruction design/activities	Breadth of student participation and feedback is exemplary. The Addendum provides further details, which may be helpful to other programs as well.
3. Instructors	Many opportunities for feedback. See Addendum for additional comments.
a) Colleague eval. procedures	
b) Student eval. of instructors	See Addendum. The program is encouraged to develop more items focusing specifically on instructor characteristics.
4. Programs	
a) Internal Review Process	
b) Accreditation	
c) Alumni evaluation	Good range of contact. See Addendum for a copy of the alumni sUNey.
d) Evaluation by professionals and advisory board	The Department's effort to develop its own advisory board is commendable and to be encouraged.
e) Comparison with similar programs	Information provided in the Addendum helps explain thedifferences mostly in the structure for delivering the curriculum, and in style and philosophy."
f) Internal strategic planning	See Addendum for elaboration. Attention to feedback is commendable.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	
B. Placement of Graduates	Job placement information is provided in the Addendum.
C. Student diversity, Dean's List, and AP status	

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	See Addendum for program RPT criteria, which include scholarship.
B. Prof. Development Expectations	
C. Non-faculty Staff Involvement	None.

D. Resources 1. Personnel	Also see Addendum.
2. Fiscal Allocation	See Addendum for information about how the program is planning for declining state support, and for an explanation of the \$0 allocation for equipment.
3. Facilities	
E. Admissions Criteria 1. Admissions profile	See Addendum for a lucid commentary on the rationale for the criteria/weightings (although it is not clear just how the specific weightings are arrived at). The use of SAQ information is appropriate.
2. Success of criteria	Suggest developing an approach to empirical validation based on appropriate indicators of student "success."
F. Applicant Pool 1. Recruitment	Targeting the lower K-12 levels is proactive and laudable. The Addendum discusses the feasibility of parallel activity appropriate to the higher K-14 levels.
2. Entering student characteristics	
G. Program Capacity 1. Current capacity	
2. Capacity/enrollment ratio	

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	Although the 1990 cohort study indicates that a large proportion of Freshman admits have graduated from other programs, the Addendum provides some explanatory commentary.
D. FTEF used	

VI. FUTURE PLANS

A. Specifically focused plans	Although stated plans focus almost exclusively on program design, the Addendum indicates the intent to target, articulate, and incorporate student learning outcomes in this process.
B. Anticipated external impacts.	See Addendum for a concise and helpful discussion of this topic.

*Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Journalism 1998-1999

I. MISSION

ITEM	COMMENTS
A. Mission Statement	Educating students in the discipline and providing professional preparation are general prototypical program orientations commonly expected of academic programs. The program's mission statement would be more useful for articulating the fundamental guiding principles and unique characteristics of the program if it were more sharply focused. The Addendum provides some additional information in this regard, particularly by developing more fully the notions of how the program views critical thinking, and information analysis/dissemination. Also, the program's intended impact on diversity awareness might be made clearer if expressed more specifically than as "cognizance" embedded in the program's guiding principles. As well, a description of the program's vision of its purpose/function within a polytechnic institution would be appropriate.
B. Distinguishing Features of Mission	Information presented focuses on the program's operation and activities, and only by implication on its mission. See Addendum for further information about unique aspects of the program's operation.

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	The stated context and focus is helpful in clarifying how the program defines critical thinking, and knowledge application. Also, it is useful to know that the senior projects require hypothesis testing. Some examples of the kinds of "ethical dilemmas" analyzed/resolved are provided in the Addendum. Other examples of significant desired knowledge outcomes, as well as an explanation of "sensitivity" to "diversity issues," would also be helpful. (The information regarding class content coverage is pertinent to the following section.)
2. Outline program content and skill coverage	
3. Co-curricular programs or activities	The SPJ club activities seem to align well with program goals. Student media opportunities are described in the report's preceding paragraph.
4. Special educational services: a) entering students	Although the procedures appear to be standard, the mandatory and documented aspects seem exemplary. Perhaps the advising sheet could include an explicit prompt to describe specific steps recommended and/or specific expectations/timelines that may be referred to in subsequent advising sessions. Also exemplary is the peer mentoring notion, which, if it can be fostered, it should be beneficial in multiple ways.
b) assistance for at-risk students	Department Head requires a meeting and a contract with at-risk students.
c) individualized opportunities:	Impressive opportunities to interact with and work in the "real world."

d) General education courses.	Non-major enrollment in JOUR courses seems substantial. Is such enrollment actively encouraged, or even required by other programs? JOUR290 seems to provide an interesting connection to the Cultural Pluralism requirement.
B. Instructional Design and Methods	The report indicates that the described "basic-to-complex" instructional approach is limited to five courses. The "issues-oriented" courses mentioned imply that a more generally applicable instructional approach might be developed/documented, which could incorporate the relatively simplistic basic-to-complex approach.
1. Approach to instruction	
2. Pedagogical theory	The de facto theory seems to be based on mixing abstract information with practical application of that information.
3. Other innovative instr. methods	Credible lab, electronic media, and database use. The program's strong co-curricular opportunities might provide a venue for establishing systematic development and exploration of further instructional innovations.
4. Incorporating research into instruction	Clear examples
C. Assessment methods and Data	Other than writing assignments, a multi-stage critique process of student work is also routinely employed.
1. Student Learning Outcomes	
a) Methods used at course level	
b) Student course outcome data	The program is encouraged to collect other evidence about student course-level learning outcomes beyond the general summary statement of intern supervisors' opinion. As a start, perhaps the mentioned faculty observations could be summarized thematically.
c) Program outcome data	Although evidence of this sort is not provided, it would seem to be available, and the program is encouraged to compile information of this sort for future reference and use. (The methods described in this section of the report provide information pertaining to section IIC2b. below.)
2. Instructional design	
a) Peer review of plans and activities	Methods seem passive and informal. The actual frequency of these activities is unclear.
b) Student feedback on instruction design/activities	Some credible approaches are presented, especially the intern de-briefing and the inclusion of students in Advisory Board and Department retreat proceedings. The senior project survey plan is exemplary.
3. Instructors	
a) Colleague eval. procedures	Standard procedures noted.
b) Student eval. of instructors	A synthesis of the positive results focusing on significant specific items would be helpful and useful. Also, were any of the general results of the open-ended items viewed as indicative of problems?
4. Programs	
a) Internal Review Process	Process seems externally driven. Suggest defining and implementing an on-going process tailored to the program's self-defined goals and needs, and information that is. or could be, routinely acquired.
b) Accreditation	Congratulations on the accreditation and attendant program improvements implemented!
c) Alumni evaluation	The survey results are vague in terms of providing information from alumni regarding their opinions about the value/effectiveness of the program. Results for item 2 suggest ways to focus subsequent investigation more sharply, and hence more usefully.
d) Evaluation by professional advisory board	Seems like a good informal process for obtaining outside feedback.

e) Comparison with similar programs	Can nationally based comparisons be made?
f) Internal strategic planning	Accreditation-driven. See comments regarding section 114a, above. Consideration of student feedback might be undertaken more systematically. Also, suggest developing mechanisms for rewarding positive results, as well as for establishing accountability for results considered inappropriate, inadequate, or negative.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	See Addendum.
B. Placement of Graduates	See Addendum.
C. Student diversity, Dean's List, and AP status	The trends of increasing % on Dean's List and decreasing % on AP are noted. Could these trends be related to the advising process?

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	See Addendum
B. Prof. Development Expectations	See Addendum. Do tenured faculty regularly submit updated professional development plans?
C. Non-faculty Staff Involvement	
D. Resources	Scholarly/research activity level seems quite good. IPA gender/ethnicity information is missing.
1. Personnel	
2. Fiscal Allocation	Advertising is the source of the substantial Mustang Daily revenue.
3. Facilities	Technology resources seem current, and the lab facilities seem innovative and appropriately experiential
E. Admissions Criteria	It would be helpful to document the rationale for the "minor modifications" to the CLA model.
1. Admissions profile	
2. Success of criteria	How does the MCA index correlate with important valid measures of student "success?"
F. Applicant Pool	Any outreach with high schools or community colleges?
1. Recruitment	
2. Entering student characteristics	
G. Program Capacity	
1. Current capacity	
2. Capacity/enrollment ratio	Can current faculty accommodate an increase of 18%? (A note in Section V of the report states that SCUs could go up if more students enroll.)

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	

D. FTEF used

VI. FUTURE PLANS

A. Specifically focused plans	Broad, almost all-inclusive, scope of issues.
B. Anticipated external impacts	

*Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Industrial Technology

1998-1999

I. MISSION

ITEM	COMMENTS
A. Mission Statement	Very applied. Focused on technology as well as management.
B. Distinguishing Features of Mission	Mostly a discussion of the program rather than the mission. Evidently the program wants its graduates to have a broader understanding of industrial technologies than would likely result from other I. T. programs.

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	Good mix of human-skills outcomes and technical competencies.
2. Outline program content and skill coverage	Information presented is very helpful in understanding the program's curricular structure. Suggest developing a statement specifically articulating the pedagogical rationale of the program structure, as distinct from the content flow, themes of coverage, and activities <i>per se</i> .
3. Co-curricular programs or activities	Active student groups, attendance at plastics and packaging meetings. Thematic parallel with curriculum, but no information is provided specifically about the integration of these activities into the curriculum or the instructional process. Co-curricular student group activities invariably provide opportunities to augment in-class instruction, and vice versa. The program is encouraged to explore how such opportunities might be taken advantage of in a systematic and sharply focused manner.
4. Special educational services: a) entering students	Information is not presented about any special services provided <u>specifically</u> for <u>entering</u> students.
b) assistance for at-risk students	Services seem to be reactive, rather than proactive or preventative.
c) individualized opportunities:	Very good co-op program. Also notable is the extensive industry support for senior projects.
d) General education courses.	
B. Instructional Design and Methods 1. Approach to instruction	Most commentary relates to MAITS program. Good explanation of their approach.
2. Pedagogical theory	The information provided in this section describes how the program relies on an objectives-based approach, and has the overarching goal of training technologically aware managers with good behavioral skills. The program is encouraged to confront more directly and explicitly the issue of expressing a pedagogical theory derived from assumptions about human learning, and to tie those theoretical assumptions explicitly to it's curricular structure and instructional methods

3. Other innovative instr. methods	Several noteworthy innovations are described. The program is encouraged to develop documentation articulating the rationale for these less traditional instructional features, especially in terms of their intended effects. (Page 4 of the report presents some cursory information of this type, which could provide a basis for developing such documentation.)
4. Incorporating research into instruction	Several instances of faculty consulting activities are cited. However, information is not presented regarding how those examples "translate directly into instruction."
C. Assessment methods and Data	Wide array of evaluative techniques used. Especially noteworthy are the presentations, which are taped for student review, and the team projects.
1. Student Learning Outcomes	
a) Methods used at course level	
b) Student course outcome data	No achievement information provided. Material presented in this section pertains to section II.C.2.b.
c) Program outcome data	Information presented pertains to section II.C.2., II.C.3., and II.CA" and does not provide evidence of achievement of student learning outcomes. Information about student performance on senior projects, or in the capstone design course, are examples of information that would be relevant to this topic.
2. Instructional design	
a) Peer review of plans and activities	Information provided indicates that this is done extensively. A more detailed statement of the process might identify some exemplary practices useful for other programs.
b) Student feedback on instruction design/activities	Course and instructor evaluation for all courses. Student club representation at I.T. Advisory Council meetings is noteworthy. Some examples of student input on this topic seem <i>exemplary</i> .
3. Instructors	
a) Colleague eval. procedures	The process, as described, seems <i>exemplary</i> . Course/instructor evaluation is performed for all courses each quarter. Team teaching of some courses provides peer evaluation. In-class visits by members of accreditation team potentially are another good source of information.
b) Student eval. of instructors	See Addendum for results.
4. Programs	
a) Internal Review Process	Information presented focuses on meeting NAIT accrediting guidelines. Recommend considering a systematic self-study activity plan explicitly connected to internal program review. The College's Area Coordinators Council apparently is the appropriate arena for such activity.
b) Accreditation	Accredited by National Association of Industrial Technology. Also see Addendum for the program's self-study for accreditation.
c) Alumni evaluation	Biennial survey covers the topic superficially. Suggest developing a more pointed and comprehensive set of items.
d) Evaluation by professionals and advisory board	Fairly active advisory board.
e) Comparison with similar programs	Difference is technological emphasis.
f) Internal strategic planning	Information presented is rather general (e.g., "... in concert with the other areas within the college."). It is not clear how the process actually operates, and how it explicitly incorporates feedback regarding student outcomes.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	No list provided. Cannot distinguish "competitive" versus in-house awards.
B. Placement of Graduates	Good success in job market. Less than 10% go immediately into graduate school. Given the goals of the program, consider tracking graduates beyond that which is provided by Career Services.

C. Student diversity, Dean's List, and AP status	
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IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	Suggest developing a statement to describe what was reported in discussion with the program to be a thorough-going, multi-faceted process, especially since the standards were reported to rely on both objective and subjective bases.
B. Prof. Development Expectations	Standards are individually determined.
C. Non-faculty Staff Involvement	Not applicable.
D. Resources	Parts a and b not answered.
1. Personnel	
2. Fiscal Allocation	Did not provide the information requested for part a, since the College budget process is centralized within the Dean's office.
3. Facilities	Much is outdated, despite donations from industry. A technician position was eliminated. The program indicated that it does not have adequate budgetary control to rectify such deficiencies, and that it considers this to be a significant problem.
E. Admissions Criteria	Some thought has been given to student characteristics that predict success, and the program is encouraged to pursue this issue vigorously.
1. Admissions profile	
2. Success of criteria	No direct studies relating specific criteria in MCA to student success in terms of learning outcomes.
F. Applicant Pool	Credible approach.
1. Recruitment	
2. Entering student characteristics	
G. Program Capacity	
1. Current capacity	
2. Capacity/enrollment ratio	

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	
D. FTEF used	

VI. FUTURE PLANS

A. Specifically focused plans	Informative presentation of curricular developments and related plans, as well as concern with facilities resources and modifications.
B. Anticipated external Impacts	

Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Industrial Engineering

1998-1999

I. MISSION

ITEM	COMMENTS*
A. Mission Statement	The discussion in this section indicates the program's commendable intent to develop a mission statement of greater clarity and specificity. Two suggestions: (1) describe/explain what is meant by "' <i>distinction</i> ' in industrial engineering; and, (2) consider whether or not the instructional process (i.e., participatory, hands-on) and curricular design (i.e., project and design centered) aspects of the program should be included in the mission statement, since these are aspects of the program's established structure, rather than its purpose or its intended effect.
B. Distinguishing Features of Mission	What features of the mission distinguish it from other similarly oriented programs? The information presented describes what the program actually does (and thus pertains to section IIC4e), not what the program attempts to do in terms of student learning and competency development. For example, although the program may provide an "emphasis on teamwork," it is not clear whether or not an actual goal embedded in the program's mission is to develop student competence in this area.

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	The provided outcome set gives a good sense of how the program tries to affect its students, although several are classified incorrectly (e.g.: "understanding <i>of</i> .." and "knowledge of ..." are cognitive, not attitudinal or social outcomes; "ability to recognize issues..." is a cognitive, not a procedural/behavioral outcome).
2. Outline program content and skill coverage	Rationale is informative and helpful in understanding the program's curricular approach. Completing the course matrices (cf. Appendix II.A.2.III) will provide a concise and clear resource, and this endeavor is strongly encouraged. Some well-described and exemplary types of innovative and capstone courses are noted. Is there an IE minor?
3. Co-curricular programs or activities	No information presented about how, or whether, these activities are actually incorporated or integrated into the program's instructional process. Some numerical data would clarify what is meant by high percentage of participation.
4. Special educational services: a) entering students	Range and nature of services to <i>entering</i> students is exemplary.
b) assistance for at-risk students	Range of advising services for all students is exemplary. The interview of out-transfers would seem to be a source of especially valuable program feedback. Of special note is the Mentor Program, which is encouraged to consider just what evidence might be gathered regarding its actual effectiveness. Also, perhaps at-risk students could be identified prior to receiving their probationary warning.
c) individualized opportunities:	Although the range of opportunities seems standard, level of participation is inferred to be quite high. The description is qualitative. No numerical or quantitative data are given, and such information would give a clearer picture of the degree to which students actually do take advantage of these opportunities.
d) General education courses.	How significant is this aspect of the program? How many external students enroll in these courses?

B. Instructional Design and Methods 1. Approach to instruction	The program's particular approach to Lab instruction is described in useful detail. However, the instructional approach used by <i>lectures</i> to "build a foundation of engineering principles beneath the process experience gained in the laboratories" needs to be explained in more detail if it involves anything much more than didactic expostulation by the instructor.
2. Pedagogical theory	Exemplary explication! The next step would be to consider what information could systematically be obtained to support these theoretical assumptions.
3. Other innovative instr. methods	An exemplary, but single, example. Does the program employ other innovative instructional methods?
4. Incorporating research into instruction	The faculty employ extensive informal integration of their research experiences into the instructional flow. In reacting to student responses to instructional tasks, instructors routinely draw from their investigations and research, and strive to apply that knowledge to provide realistic applications and to enhance conceptual understanding.
C. Assessment methods and Data 1. Student Learning Outcomes a) Methods used at course level	Exemplary presentation.
b) Student course outcome data	Information not provided. Needed is evidence and information about students' attainment of the program's significant intended outcomes as identified in 11.A.1. (Perhaps the documents cited on p.11 could provide the kind of information requested in this section.)
c) Program outcome data	Good potential noted in this area. Perhaps senior projects can provide evidence indicating students' levels of performance related to the program's objectives. Although alumni surveys will only provide SUBjective perceptions of outcome attainment, the planned exit exam should be an excellent objective source of program outcome attainment, and its careful design is strongly encouraged.
2. Instructional design a) Peer review of plans and activities	Review <i>specifically</i> of faculty's instructional plans and design appears only as embedded in the broader context of standard RPT processes. (Material presented in this section pertains to section IIC3a.)
b) Student feedback on instruction design/activities	Rudimentary instrumentation. A sharper and broader focus specifically on instructional design issues is encouraged.
3. Instructors a) Colleague eval. procedures	
b) Student eval. of instructors	Suggest revising/creating items to contain more specific focus on a broader range of issues.
4. Programs a) Internal Review Process	Allusions to TOM notwithstanding, the actual process is not clearly described.
b) Accreditation	
c) Alumni evaluation	Extensive alumni feedback instrument and exemplary processing.
d) Evaluation by professionals and advisory board	
e) Comparison with similar programs	
f) Internal strategic planning	Exemplary process, clearly and simply described, including focus on specific criteria.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	
B. Placement of Graduates	Professional employment data are missing. The recent alumni feedback instrument contains related items, so placement information should be available at least for the sample of alumni responding.
C. Student diversity, Dean's List, and AP status	

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	Promulgating the specific criterion of curricular development is a logical and commendable extension of the program's character and instructional approach.
B. Prof. Development Expectations	Information not provided.
C. Non-faculty Staff Involvement	
D. Resources	Exemplary presentation of faculty information.
1. Personnel	
2. Fiscal Allocation	See Addendum. However, information is not provided regarding the amount of assigned time, and its purpose, for each faculty.
3. Facilities	
E. Admissions Criteria	
1. Admissions profile	
2. Success of criteria	Suggest begin lookinginto the relationship between learning outcomes and the admissions criteria."
F. Applicant Pool	Seems exemplary.
1. Recruitment	
2. Entering student characteristics	No information/discussion regarding notable characteristics of entering students.
G. Program Capacity	Not specified.
1. Current capacity	
2. Capacity/enrollment ratio	

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	
D. FTEF used	

VI. FUTURE PLANS

A. Specifically focused plans	Focus seems virtually exclusively on the ABET accreditation process, yet the program seems to realize that that process does not focus equally or adequately on all its important aspects. Suggest developing specific plans focusing on enhancing the level of achievement of the stated goals of the program.
B. Anticipated external impacts.	

Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Engineering M.S.

1998-1999

I. MISSION

ITEM	COMMENTS
A. Mission Statement	Stated very generally. Seems all encompassing. A bit more specificity could clarify the program's particular orientation, as well as just what students are expected to gain from the program. In particular, consider describing the concept of the "design centered approach" concisely in terms of its purpose and expected function in the learning process.
B. Distinguishing Features of Mission	Information provided in this section pertains to section IIC4e.

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	Description is so general and abstract that it does not provide clarity regarding what student competency would look like. For example, what is meant by "objective analysis," "feel" for building valid experiments," or "engineering judgement?" The discussion includes information about instructional processes, which is different from intended outcomes (and which pertains to sections II B and IIC4e, below).
2. Outline program content and skill coverage	Refers to catalogue. Rationale for sequence is minimal. No topical description is provided.
3. Co-curricular programs or activities	Co-curricular student group activities invariably provide opportunities to augment in-class instruction, and vice versa. The program is encouraged to explore how such opportunities might be taken advantage of in a systematic and sharply focused manner.
4. Special educational services: a) entering students	Information is not presented about any special services provided <u>specifically</u> for <u>entering</u> students.
b) assistance for at-risk students	Insufficient detail is provided for evaluating the program's services of this type, especially in terms of being "proactive."
c) individualized opportunities:	The extent to which these opportunities are taken advantage of is not clear. Also, examples of cited cross-College activity would be helpful.
d) General education courses.	Not applicable.
B. Instructional Design and Methods 1. Approach to instruction	Suggest developing documentation describing the instructional approach that is used in labs/seminars to foster exploration, as well as information about just how independent study is structured to foster "personal discovery."
2. Pedagogical theory	The program apparently has not articulated a pedagogical theory. The program is encouraged to consider the issue of expressing a pedagogical theory derived from assumptions about human learning, and to tie those theoretical assumptions clearly to it's curricular structure and instructional methods. Although not required, such a theory can serve many purposes, including providing a basis and a guide for evaluating instructional effectiveness, considering and assessing instructional innovations, orienting student expectations, and focusing student satisfaction

	assessment.
3. Other innovative instr. methods	Excellent examples. However, no rationale or description of expected effects is provided.
4. Incorporating research into instruction	Examples are needed to provide credibility for the assertion that this occurs.
C. Assessment methods and Data	Wide array presented.
1. Student Learning Outcomes	
a) Methods used at course level	
b) Student course outcome data	Information presented deals with assessment methods, not outcome attainment information.
c) Program outcome data	Alumni/employer satisfaction does not provide objective information regarding the degree to which the program's intended learning outcomes are attained.
2. Instructional design	Activity of this type appears to be imbedded in the RPT process and in the activity of the College's curriculum committee.
a) Peer review of plans and activities	
b) Student feedback on instruction design/activities	Although not systematically acquired, nor sharply focused, the program appears to obtain data on this topic.
3. Instructors	Standard procedure employed.
a) Colleague eval. procedures	
b) Student eval. of instructors	Form used is not provided.
4. Programs	Seems adequate, although more detail is needed to determine if the process is rigorous or perfunctory.
a) Internal Review Process	
b) Accreditation	Not applicable.
c) Alumni evaluation	Consider defining and implementing an on-going and systematic process focusing on the program's specific goals and plans.
d) Evaluation by professionals and advisory board	Advisory board role is unclear. Also, as with program alumni, consider defining and implementing an on-going and systematic process focusing on the program's specific goals, plans, and procedures.
e) Comparison with similar programs	
f) Internal strategic planning	Process is described in extremely general terms. No mention is made of how the program uses any outcome assessment or program evaluation information that may be available.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	No specifics are provided.
B. Placement of Graduates	Information is cursory and anecdotal. Professional employment data would be informative. Recommend considering a more thorough going approach to this issue, and obtaining more detailed data.
C. Student diversity, Dean's List, and AP status	

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	Program does not have its own faculty.
B. Prof. Development Expectations	Program does not have its own faculty
C. Non-faculty Staff Involvement	None.
D. Resources	Program does not have its own faculty
1. Personnel	
2. Fiscal Allocation	Information not provided
3. Facilities	Information not provided
E. Admissions Criteria	Are all criteria weighted equally? Are there cut-off points or other minimal standards?
1. Admissions profile	
2. Success of criteria	Although "success" is reasonably described in general terms, the evidence is subjective and anecdotal. Consider the benefit and power of obtaining empirical data on this issue.
F. Applicant Pool	Recommend investigating the reasons for shrinkage of the applicant pool. with the goal of ameliorating this development.
1. Recruitment	
2. Entering student characteristics	
G. Program Capacity	
1. Current capacity	
2. Capacity/enrollment ratio	

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	
D. FTEF used	

VI. FUTURE PLANS

A. Specifically focused plans	The intended expansion in bioengineering and biomedical engineering is noted, as well as the future mechatronics focus. (The other material presented describes the 4+1 program, and belongs in section IIC4e.)
B. Anticipated external impacts	

*Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate. and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Environmental Horticultural Science

1998-1999

I. MISSION

ITEM	COMMENTS
I. MISSION A. Mission Statement	Very general and vague as such. Some clarifying focus and detail is found in Appendix C.
B. Distinguishing Features of Mission	Other than the emphasis on undergraduate education, as noted in the Addendum, the material provided describes the nature of the program, not the notable features of the program's mission.

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	Although this section contains information about some intended student learning outcomes, it is not organized by outcome categories, and is deeply imbedded into discussion about what the program does, as well as general areas of professional competence. A more succinct and sharply focused statement about the program's highest priority intended learning outcomes would provide a clearer basis and guide for assessment, evaluation, and accountability.
2. Outline program content and skill coverage	Although course sequencing (page 4) seems reasonable, the rationale for the course sequencing must be inferred, since none is presented.
3. Co-curricular programs or activities	This section (and the Addendum) contains information about a range of co-curricular activities, but does not explain how, or in fact if, they are explicitly integrated into the instructional process.
4. Special educational services: a) entering students	Teaching a one-unit course to serve as a means to guide students may be exemplary, depending on the course structure and how it is taught.
b) assistance for at-risk students	The contracting process between department head and at-risk students is a potentially powerful procedure. It is not clear just how rigorous, systematic, and effective this process is. (Also see Addendum.)
c) individualized opportunities	Also see Addendum.
d) General education courses	None currently offered, although it is planned to reinstate one course in this capacity.
B. Instructional Design and Methods 1. Approach to instruction	Approach is very traditional and conventional. Suggest considering a wider range of techniques. In any event, it would be helpful to have more information available about just how classes are "intentionally constructed to encourage development of problem solving," as well as how systematically the "strong individual learning component" in upper division classes is actually employed. (Also see Addendum.)
2. Pedagogical theory	Beyond commitment to the extensive use of hands-on activity (see Addendum), an explicit theory would be useful as a framework and guide for selecting and evaluating instructional methods.
3. Other innovative instr. methods	
4. Incorporating research into instruction	See Addendum.

C. Assessment methods and Data	
1. Student Learning Outcomes	
a) Methods used at course level	
b) Student course outcome data	Evidence regarding attainment of course outcomes not provided. The material provided is indirect evidence of program outcomes.
c) Program outcome data	Material provided belongs to section II.B.1 (i.e., Approach to Instruction). Information is not provided regarding methods used to assess significant desired student learning outcomes, and the evidence thereby produced.
2. Instructional design	
a) Peer review of plans and activities	
b) Student feedback on instruction design/activities	Although selected items on the course evaluation form might be used for this specific purpose, there is no indication that this does happen.
3. Instructors	
a) Colleague eval. procedures	
b) Student eval. of instructors	See Addendum, Attachment 1.
4. Program	See Addendum.
a) Internal Review Process	
b) Accreditation	
c) Alumni evaluation	Consider more frequent surveys of alumni. Heavy reliance is placed on feedback that is only informal.
d) Evaluation by professional advisory board	Department's Advisory Council meeting summary highlights good points for department to consider.
e) Comparison with similar programs	Also see Addendum.
f) Internal strategic planning	

III. STUDENT CHARACTERISTICS

A. Awards and Honors	
B. Placement of Graduates	
C. Student diversity, Dean's List; and AP status	The percentage of students on Dean's list increased from 5.4 to 11.6% from Fall 94 to Fall 98. Also, percentage of students on academic probation declined from 31.4 to 19.7% during the same period.

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	Program adopts college's criteria.
B. Prof. Development Expectations	See Addendum.
C. Non-faculty Staff Involvement	See Addendum.

D. Resources 1. Personnel	Also see Addendum.
2. Fiscal Allocation	Excellent commentary.
3. Facilities	Excellent commentary.
E. Admissions Criteria 1. Admissions profile	
2. Success of criteria	Credible validity assessment of admission criteria should be based on scientific, preferably quantitative, objective information, not on qualitative assumptions and interpretations of generalities.
F. Applicant Pool 1. Recruitment	See Addendum.
2. Entering student characteristics	Summary is exemplary, but data provided by IPA does not seem to reflect concern mentioned.
G. Program Capacity 1. Current capacity	See Addendum.
2. Capacity/enrollment ratio	See Addendum.

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	
D. FTEF used	See material presented in section V.B.

VI. FUTURE PLANS

A. Specifically focused plans	Given program's concerns presented in section IV.G.2, it is clear that those concerns need to be addressed. Also see the email note appended to the Addendum.
B. Anticipated external impacts.	Thoughtful and comprehensive discussion.

*Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Dairy Science

1998-1999

I. MISSION

ITEM	COMMENTS-
A. Mission Statement	Recommend considering a mission statement focusing more on desired criteria of a program embedded in the academic context of a University, and less on relative/normative standing. Such a statement might be more appropriate (and defensible), and more directly reflective of program philosophy and goals. (Also see Addendum.)
B. Distinguishing Features of Mission	The information provided in the report for this section portrays distinctive features of the program, not the mission, and, as such, pertains to section IIC4e. However, page 2 of Appendix 1 contains information possibly relevant to this section. (Also see Addendum.)

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	Although neither prioritized nor categorized, the most significant intended outcomes apparently are critical thinking, currency in technological competence, cross-cultural social interaction skills, knowledge of political issues and their application to agricultural issues in the social realm, and competency in responsible food production. Recommend developing more specific documentation including information about behaviors or other observable indicators of just how they would be recognized, and measured. Material provided in the Addendum indicates that faculty will "be encouraged to include specific learning outcomes in their assessment of student competency." The program is encouraged to proceed with this plan. Also, the provided course-by-outcome matrix is very informative, and should be helpful in planning outcome assessment strategies.
2. Outline program content and skill coverage	Good overview. However, no course sequencing requirements/suggestions or rationale are provided. Other than generic GE courses, it is not apparent just what courses focus on critical thinking and the other outcome areas noted in the preceding section.
3. Co-curricular programs or activities	
4. Special educational services: a) enterinQ students	Described are special services for admits prior to enrollment. Also see Addendum.
b) assistance for at-risk students	Also see Addendum.
c) individualized opportunities:	The exchange program and the penitentiary program seem innovative, even <i>exemplary</i> . What proportion of students take part in these program?
d) General education courses.	
B. Instructional Design and Methods 1. Approach to instruction	Consider giving serious consideration to less traditional approaches, such as small-group collaborative tasks, student peer instruction, simulations, instructor-monitored task guidance and process "work-throughs," etc.

<p>2. Pedagogical theory</p>	<p>Although not required, such a theory can provide a basis for considering and assessing instructional innovations, as well as evaluating instructional effectiveness, orienting student expectations, and determining student satisfaction. Perhaps a start could be made by explaining and expanding the statement in the preceding section that "Laboratories are a great part of instructional and pedagogical strategy in the program."</p>
<p>3. Other innovative instr. methods</p>	<p>CD-ROM resource seems appropriate. Also see Addendum.</p>
<p>4. Incorporating research into instruction</p>	<p>The infusion of research-related personnel, and the increased program support resulting from program research projects, are laudable developments. Other than adapting laboratory activities and supporting related professional presentations by faculty and staff, to what extent does faculty research impact/alter instruction? Is there some coherent research focus that supports instruction? (A pedagogical theory would provide a conceptual framework for <i>systematically</i> integrating research and its results into instructional practice.) Also see Addendum.</p>
<p>C. Assessment methods and Data 1. Student Learning Outcomes a) Methods used at course level</p>	<p>The meaning of a "goal-oriented" assessment process is unclear. Just what kinds of tasks are focused on when performance proficiency is assessed? What is the role of instructor-constructed tests and/or quizzes? Also unclear is the notion of designing assessment methods based on students' goals and experiences. Methods should be explicitly linked to student learning outcome goals. The debate example is <i>exemplary</i> in terms of articulating a range of assessment criteria. Can other such clear examples of generally used methods be provided? The Addendum provides a useful matrix of courses by assessment methods, as well as some additional examples of specific assessment tasks.</p>
<p>b) Student course outcome data</p>	<p>Information is not provided regarding the degree to which students actually attain the program's most significant desired learning outcomes. Given the matrix provided in the Addendum for section IIA1, perhaps grade distribution information might be appropriate, depending on the degree to which grades accurately reflect the attainment of the outcomes specified.</p>
<p>c) Program outcome data</p>	<p>Could the DSAC feedback include a focus on student learning outcomes? Although information regarding program outcome data apparently is also obtained via DSC1463, capstone courses, and other upper division courses, information/results are not provided. Also see Addendum</p>
<p>2. Instructional design a) Peer review of plans and activities</p>	<p>The establishment of a process specifically for this purpose is recommended, pending development/articulation of pedagogical theory. The Addendum provides two examples of course revision activity based on information generated from the process described on p.11 (section IIC4a).</p>
<p>b) Student feedback on instruction design/activities</p>	<p>DSCI 463 seems an <i>exemplary</i> source of comprehensive and reflective student feedback on instructional design. Outside of this course, student feedback seems to be obtained unsystematically and informally. (Material at top of page 9 seems applicable to this section, since it describes student feedback regarding specific instructional resources and activities, although not on instructional design, <i>per se</i>.) Some anecdotal summary results of feedback are provided in the Addendum.</p>
<p>3. Instructors a) Colleague eval. procedures</p>	
<p>b) Student eval. of instructors</p>	<p>The updated evaluation form used by the students seems a potentially useful improvement for focusing feedback more specifically. Also see Addendum.</p>
<p>4. Programs a) Internal Review Process</p>	<p>Addendum provides information about sources of student learning information. However, neither the actual internal review processes, nor the review criteria employed, are described with sufficient specificity to determine just how systematic and rigorous they actually are.</p>

b) Accreditation	See Addendum for additional information. The program might consider the Senate-approved guidelines for external program review as criteria for this endeavor.
c) Alumni evaluation	Indirect, informal, and unsystematic. The Addendum mentions plans to develop an instrument for this purpose, and the program is encouraged to follow through with this plan.
d) Evaluation by professionals and advisory board	The contact with industry professionals does not systematically focus on student learning outcomes, or any other specific program issues or features. Rather, it provides ad hoc suggestions for revisions. See Addendum.
e) Comparison with similar programs	Also see section IB of the report.
f) Internal strategic planning	See Addendum for details of what seems to be a dynamic, flexible, and frequent process. The five-year plan (Appendix 1) does not appear to incorporate or accommodate student learning outcome information.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	Students seem to have garnered an exceptional amount and range of honors.
B. Placement of Graduates	
C. Student diversity, Dean's List, and AP status	

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	Insofar as the teaching criteria of vision, design, enactment, outcomes, and analysis are actually employed, this aspect of the definition of faculty scholarship is clear and credible. Although the majority of the remaining information presented in this section focuses on student activity and program design, additional information is presented in the Addendum.
B. Prof. Development Expectations	
C. Non-faculty Staff Involvement	
D. Resources	
1. Personnel	
2. Fiscal Allocation	As noted on page 3 of the Advisory Board minutes (Appendix 6), the program enjoys a substantial subsidy from the University. What are the program's plans to become more self-supporting or to otherwise reduce this need?
3. Facilities	Remarkable and noteworthy array of specialized facilities.
E. Admissions Criteria	
1. Admissions profile	
2. Success of criteria	Although capacity exceeds enrollment, selection criteria could be used as predictors of student "success," which should be operationally defined in terms of student learning outcomes, in addition to whatever professional placement results are of interest.
F. Applicant Pool	
1. Recruitment	Strong, multifaceted, and recently developed initiatives are noted.
2. Entering student characteristics	

G. Program Capacity 1. Current capacity	
2.Capacity/ enrollment ratio	

V.INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	Is the disproportionate allocation of research activity to specific faculty in conflict with the disclosure that faculty are forced into jobs that they were not hired to do? The table on page 24 is informative. What can be done to reconcile these data with University-provided data?
C. Retention/graduation	Stated impact of curricular revision is noted.
D. FTEF used	The recent increase in FTEF does not correspond to a SCU increase; the discussion on pages 19-20 addresses this issue.

VI. FUTURE PLANS

A. Specifically focused plans	Development of a five -year plan is noted and applauded, as is the appropriate use of information obtained in the process of developing this program review report for program self-assessment purposes.
B. Anticipated external impacts	<i>Exemplary</i> identification and discussion of external issues and circumstances in addition to internally generated emphases and plans.

Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

BioResource and Agricultural Engineering & Agricultural Systems Management 1998-1999

I. MISSION

ITEM	COMMENTS
A. Mission Statement	Summarizes as applied (i.e., learn-by-doing) approach to professional preparation. According to the Addendum, the program is "disinclined to change" the mission statements at this time, and for apparently appropriate reasons. When this issue is revisited, it is suggested that consideration be given to having the mission statement mention the most significant discipline-related concepts and professional orientation/characteristics that the program attempts to instill in its students.
B. Distinguishing Features of Mission	Size and design are features of the program, not specifically of its mission. The Addendum provides details of the "range of application areas," and provides a clearer sense of the program's mission.

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	Cognitive outcomes, as stated, describe general areas of competency and learning. Examples of important behavioral indicators of those areas of knowledge and skills would be useful to have documented in order to specify and clarify just what those general areas of competency mean. Behavioral outcomes are relatively clear and specific. Note that outcome ASM-CO.3, by focusing on "applying," seems more behavioral than cognitive. Similarly, BRAE-CO.2 targets "designing" in what seems to be more in a behavioral than a cognitive sense. Also, note that outcome AO.1 for both programs is stated in cognitive terms (i.e., "understanding"), rather than in terms of relative valuing or behavior demonstrating some value system that the program desires to foster.
2. Outline program content and skill coverage	See Addendum for additional information. The rationale for course sequencing is expressed in content-coverage terms. Documentation of pedagogical or psychological (i.e., learning theory based) rationale for curricular structure and sequence would be useful.
3. Co-curricular programs or activities	No co-curricular activities are systematically incorporated into the program's instructional process, although there are three program-affiliated student clubs. Although participation in such activities is usually voluntary, as noted in the Addendum retort, such activities do, by their nature, usually provide the opportunity to incorporate significant curricular issues systematically and coherently in ways that are likely to foster the attainment of important desired program outcomes. The program is encouraged to explore this issue of forging explicit and dynamic links between curricular and co-curricular activities.
4. Special educational services: a) entering students	See Addendum for a characterization of the program's zeal in this endeavor. Suggest systematically following up on these services, both in terms of student satisfaction and in terms of effectiveness for their particular specific purposes. Contacting of Freshmen by enrolled students might have potential for further development as an innovative and effective process, depending on its specific desired outcomes.
b) assistance for at-risk students	Could increased attention and effort in this regard enhance program completion ratio? Might not some of the responsibilities/activities specified for the DH be

	appropriate for the advisors as well?
c) individualized opportunities:	See Appendix 8 of report, Addendum, and Appendix 8 of Addendum.
d) General education courses.	How aggressively are these courses marketed to non-majors?
8. Instructional Design and Methods	No other detail about instructional philosophy, theory, or general conceptual framework is provided beyond what may be inferred by the use of lectures and associated labs, and the statement in the Addendum.
1. Approach to instruction	
2. Pedagogical theory	Addendum provides some elaboration and references regarding the theoretical basis for the program's learn-by-doing approach.
3. Other innovative instr. methods	Credible assortment and range.
4. Incorporating research into instruction	See Addendum for two examples.
C. Assessment methods and Data	<i>Exemplary</i> presentation and impressive array.
1. Student Learning Outcomes	
a) Methods used at course level	
b) Student course outcome data	This systematic approach to providing course-level outcome information is <i>exemplary</i> . Page 3 of the Addendum provides additional indicators of student outcome attainment. Insofar as course grading criteria are explicitly and directly linked to the outcome areas specified, grade distributions provide appropriate outcome evidence. Also, insofar as this is the case, significant specific course objectives could be used to exemplify/clarify the program's intended learning outcomes, as requested for IIA1, above.
c) Program outcome data	FE exam scores are relevant only insofar as they reflect specific intended program learning outcomes. Completion, <i>per se</i> , of sponsored projects does not provide evidence for level of proficiency regarding specific intended program learning outcomes. Also, entry salary is only an indirect measure of intended program learning outcomes.
2. Instructional design	Process seems minimal in terms of specifically reviewing the actual instructional process.
a) Peer review of plans and activities	
b) Student feedback on instruction design/activities	Student committee membership is laudable. See Addendum for assertion of the viability of the program's informal student feedback.
3. Instructors	
a) Colleague eval. procedures	
b) Student eval. of instructors	
4. Programs	
a) Internal Review Process	
b) Accreditation	See Addendum.
c) Alumni evaluation	Survey is a commendable initiative. Suggest sharper and more systematic focus on program's most significant intended learning outcomes, even if only by obtaining self-perceptions of outcome attainment.
d) Evaluation by professionals and advisory board	Suggest considering doing more than just the recent survey. Advisory Council meeting report is in Addendum.

e) Comparison with similar programs	See Addendum for statement that the program is more committed to teaching than other such programs, and Addendum Attachment E for a comparison of curricular coverage.
f) Internal strategic planning	Although the program exemplifies considerable and broad-ranging activity on this topic, it is suggested that consideration also be given to establishing a proactive, systematic, on-going approach to the process.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	See Attachment F of the Addendum.
B. Placement of Graduates	
C. Student diversity, Dean's List, and AP status	

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	<i>Exemplary</i> level of specificity and range of criteria.
B. Prof. Development Expectations	Standards (Le., expected levels of low/adequate/high attainment) for the criteria are not provided. The Addendum indicates that the program does not wish to do so.
C. Non-faculty Staff Involvement	Not applicable.
D. Resources	Impressive array of activity
1. Personnel	
2. Fiscal Allocation	<i>Exemplary</i> presentation of information.
3. Facilities	
E. Admissions Criteria	See Addendum.
1. Admissions profile	
2. Success of criteria	Approach and presentation are <i>exemplary</i> . However, the criterion (overall GPA) is extremely general, and affected by so many other variables that linking it clearly and directly to admission criteria presents logical problems. Moreover, the degree to which the program is effective for all students would result in a lack of correlation between entering and exit GPAs (assuming that exit GPA validly reflects attainment of the program's intended learning outcomes). Comments in the Addendum notwithstanding, it is suggested that the program investigate and consider more specific admissions criteria validation variables.
F. Applicant Pool	Percent of applicants accommodated is very high. Although the program is satisfied with the characteristics of its applicants (see Addendum), it might be even more satisfied with its enrollees if they were drawn from a larger pool, as noted in section IV.G.2. of the program's report.
1. Recruitment	
2. Entering student characteristics	
G. Program Capacity	The program's current under-enrollment is noted, and the corresponding change in FTEF/SCU ratio. The course repackaging plans on page 54 are noted, in addition to the other recruitment efforts to obtain capacity enrollment without increased resources.
1. Current capacity	
2. Capacity/enrollment ratio	Program is encouraged to continue its recruiting efforts.

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	
D. FTEF used	Informative commentary. Approach described is credible.

VI. FUTURE PLANS

A. Specifically focused plans	Plans are reasonable and clearly focused.
B. Anticipated external impacts.	The campus' internal program review process has been evolving in a manner congruent with the changing ABET orientation. Consequently, the program may find some campus resources helpful in attending to upcoming ABET requests and requirements.

Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Art & Design

1998-1999

J. MISSION

ITEM	COMMENTS
A. Mission Statement	The statement provided identifies domains of knowledge and skills which the program is intended to enhance, as well as professions for which the program is intended to provide preparation.
B. Distinguishing Features of Mission	The notable features of the program's <i>mission</i> are not noted. (Much of the provided material pertains to other sections of the report.)

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	Student outcomes are generally outlined (although some seem misclassified). Greater specificity and reliance on behavioral referents or other observable characteristics of competence in the areas mentioned would communicate the program's intended learning outcomes more clearly to those unfamiliar with the program.
2. Outline program content and skill coverage	Clearly described core and concentrations. Program's capstone and professional experiences, and flexibility for career direction are notable. Some courses seem to overlap with those offered by other programs. Insofar as the program's courses replicate those of other departments, consider a serious investigation of interdisciplinary courses that might meet program needs, supplement its material and intellectual resources, and provide greater curricular flexibility.
3. Co-curricular programs or activities	Activities align well with program goals, both in terms of building fundamental skills and knowledge, and in linking with professional and business practices.
4. Special educational services a) entering students	Services for entering students seem to be identified and initiated at the discretion of individual faculty members, based on their in-class observations of students.
b) assistance for at-risk students	Services for at-risk students seem to be identified and initiated at the discretion of individual faculty members, based on their in-class observations of students. Information provided is insufficient to evaluate the rigor of this service, or just what happens when faculty and the department chair "make a special effort to track their progress and give exceptional individualized advisement." Suggest considering a systematic intervention/contract process (e.g., establishing mandatory steps in the process, developing explicit definitions of student success and a process for monitoring it, etc.).
c) individualized opportunities	Good breadth of opportunities with real-world applications.
d) General education courses	Extensive university course offerings. Suggest considering what the program might gain by <i>integrating</i> interdisciplinary courses vs. only offering GE/service courses.

<p>B. Instructional Design and Methods</p> <p>1. Approach to instruction</p>	<p>Commentary is informative. A specific aspect of the described approach is the intention that students "...make 'connections' between art and ideas in diverse cultural contexts." More detail would be helpful regarding just how this commendable goal is operationalized via explicit instructional techniques.</p>
<p>2. Pedagogical theory</p>	<p>Material presented in this section elaborates on intended student learning outcomes, as well as how the instructional approach differs between the fine arts and the applied arts emphasis.</p>
<p>3. Other innovative instr. methods</p>	<p>A number of credible innovative instructional methods are identified, some of which seem to be dependent on specific facilities/labs/studios.</p>
<p>4. Incorporating research into instruction</p>	<p>Integration of faculty professional work seems extensive. Good explanation of how research is of value to the student/class.</p>
<p>C. Assessment methods and Data</p> <p>1. Student Learning Outcomes</p> <p>a) Methods used at course level</p>	<p>Standard methods.</p>
<p>b) Student course outcome data</p>	<p>Discussion elaborates on details of methods cited in preceding section. No evidence of the degree of student learning outcome attainment is presented. The program is strongly encouraged document course level evidence regarding the degree to which students actually attain such outcomes as, for example, "quality of work," "success in problem solving," "thinking process" etc.</p>
<p>c) Program outcome data</p>	<p>An exemplary array of outside-of-course methods is presented for obtaining information about the degree of student learning outcome attainment. However, no summary is presented of the outcome-attainment evidence produced by those methods. The program is strongly encouraged accumulate and document such evidence. For example, is there any information on student performance on capstone projects, quality of student portfolios. etc.? (The information presented about student evaluation, quarterly meetings, and alumni questionnaires belongs in section II.C.2.b.)</p>
<p>2. Instructional design</p> <p>a) Peer review of plans and activities</p>	<p>No critical peer review specifically focusing on instructional practices appears to occur independently of the general faculty review process.</p>
<p>b) Student feedback on instruction design/activities</p>	<p>The process requires that at least two courses per year be evaluated. No procedure exists for systematic review of those data. It is not clear how rigorous and sharply focused the end-of-course sessions and the quarterly Department meetings are.</p>
<p>3. Instructors</p> <p>a) Colleague eval. procedures</p>	<p>Standard procedures.</p>
<p>b) Student eval. of instructors</p>	<p>Summary information not provided. Instrument is rudimentary. Suggest revising/creating questions that would allow the program to assess a broader range of issues than instructor's presentation/organization (e.g., course content, lab/studio experience, and learning attainment).</p>
<p>4. Programs</p> <p>a) Internal Review Process</p>	<p>Material presented repeats material presented previously in section II.C.1.c. It is not clear whether or not the program has a system for defining and implementing an on-going, systematic process tailored to monitoring the program's attainment of goals and needs, and future direction.</p>
<p>b) Accreditation</p>	<p>Occurred in 1995.</p>
<p>c) Alumni evaluation</p>	<p>Some potentially excellent sources of alumni feedback are mentioned, especially from the portfolio review and Advisory Board activities. Biannual implementation and collection/assessment of responses is exemplary. However, the alumni questionnaire is extremely general and unfocused. Suggest further development of this instrument as an aid in obtaining more useful information</p>

	for program enhancement. See Addendum for the 1999 Survey results, and for Senior portfolio review/comments.
d) Evaluation by professionals and advisory board	Minutes from the latest Advisory Board meeting are not provided. Have there been any actions/changes/direction as a result of advisory input?
e) Comparison with similar programs	Would nationally based comparisons be useful?
f) Internal strategic planning	Process seems to be imbedded into regular Department discussions, although no specific structure or approach to internal strategic planning seems apparent. Suggest developing some sort of systematic feedback system to inform program decisions.

III. STUDENT CHARACTERISTICS

A. Awards and Honors	Most awards mentioned appear to be internal to the program.
B. Placement of Graduates	Information is largely anecdotal and unsystematically obtained. What percent of graduates obtain employment upon graduation? What percent go on to seek a post-graduate degree? Consider integrating questions on the biannual alumni questionnaire that focus on employment status.
C. Student diversity, Dean's List, and AP status	

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	Most of the material presented belongs in the following section. Information is not provided regarding "standards used to define acceptable scholarship accomplishments," and scholarship is not defined in reference to "the four types."
B. Prof. Development Expectations	It is not clear if there are distinct criteria for probationary and tenured faculty, or if tenured faculty regularly submit professional development plans.
C. Non-faculty Staff Involvement	Excellent use of staff for instructional purposes. Instructional support seems notably more extensive than that enjoyed by other programs.
D. Resources	Faculty/Staff Record Report template is a good model that provides consistency in reporting professional achievements.
1. Personnel	
2. Fiscal Allocation	
3. Facilities	Extensive and up-to-date labs support a variety of areas of study.
E. Admissions Criteria	Portfolio review is unique to comparable programs and seems to provide crucial information in selecting highly qualified students likely to succeed in the program. Studio Art and Graphic Design sheets contain specific criteria. It would be useful to have information about rigorouslv they are aoolied.
1. Admissions profile	
2. Success of criteria	Program is on the right track in this area, although the measures of "success" need to be tied more directly to particular significant intended learning outcomes rather than to GPA in general. Also note that the correlation between entering and exiting GPAs does not relate to admission criteria.
F. Applicant Pool	Department newsletter sent to colleges and high schools (print and online) is commendable.
1. Recruitment	
2. Entering student characteristics	No commentary provided.
G. Program Capacity	
1. Current capacity	
2. Capacity/enrollment ratio	

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	No commentary provided.
B. SCU generation	No commentary provided.
C. Retention/graduation	No commentary provided.
D. FTEF used	No commentary provided.

VI. FUTURE PLANS

A. Specifically focused plans	Discussion focuses exclusively on fiscal and physical resource issues.
B. Anticipated external impacts	Good vision and anticipation for future changes as they align to changes in technology/society/artlprogram growth.

•• Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.

PROGRAM REVIEW REPORT

Agricultural Education and Communication

1998-1999

I. MISSION

ITEM	COMMENTS
A. Mission Statement	Recommend that the planned revised mission statement incorporate and articulate the program's assumptions about its particular value and purpose (including how that value and purpose fits within a polytechnic institution), and also provide information about just what impact (i.e., learning/competency outcomes) the program is trying to have on its students. The program's mission statement can provide a rationale from which program goals and specific intended outcomes can logically emerge. (Note that Attachment IA provides information about activities to be undertaken, rather than specifying the impact that such activities are intended to have upon student learning.)
B. Distinguishing Features of Mission	Program has a unique focus on teacher preparation and integration of teacher preparation into MS degree program. Although some inferences may be made regarding the distinguishing features of the program's mission, most of the information provided pertains to section II.C.4.e. The Addendum explains why the seven areas were chosen for comparison.

II. INSTRUCTIONAL ISSUES

A. Educational Goals 1. Intended student outcomes	Intended outcomes appear to be critical thinking (analysis and synthesis) and delivery of information (communication skills). Also, leadership and attitudinal skills related to diversity are mentioned. Suggest that the program consider developing a concise and explicit list of its most significant intended learning outcomes as a summary statement and focus for program development and for accountability.
2. Outline program content and skill coverage	Information on curricular rationale is helpful. Addendum provides information regarding the compatibility of course sequencing with UCTE course sequencing. (Note that the information presented in the last portion of this section pertains to sections II.B.3. and II.B.4.)
3. Co-curricular programs or activities	Program has several co-curricular activities. See Addendum for an explanation on how these activities are integrated into the program's instructional process.
4. Special educational services: a) entering students	Addendum provides information about the course structure of AgEd 202, and how it provides advising to entering students.
b) assistance for at-risk students	Part of the information provided in 11.4.a applies here. Addendum provides information about the contracting process between department head and at-risk students, as well as when and how contracts are made.
c) individualized opportunities:	
d) General education courses.	Courses listed are for Agriculture majors.
B. Instructional Design and Methods 1. Approach to instruction	Most of the information presented in this section pertains to section II.B.3.
2. Pedagogical theory	Although not required, such a theory can provide a basis for evaluating instructional effectiveness, considering and assessing instructional innovations, orienting student

	expectations, and focusing student satisfaction assessment. Perhaps documenting the rationale behind the methods and activities described in this and in the preceding section could provide a start.
3. Other innovative instr. methods	Integration of "all three circles" is unique. Encouraging students to place their own unique lesson and unit plans on the Web for others to use and possibly critique is exemplary.
4. Incorporating research into instruction	Addendum provides information about how senior projects and other research are incorporated into instruction,
C. Assessment methods and Data	
1. Student Learning Outcomes	
a) Methods used at course level	
b) Student course outcome data	The alumni survey provides indirect evidence of program outcomes. Direct evidence regarding attainment of course outcomes is not provided.
c) Program outcome data	Completing the activities mentioned provides the information requested only insofar as those activities are explicitly connected with specific program intended learning outcomes. Recommend developing such a summary statement for program evaluation and accountability.
2. Instructional design	
a) Peer review of plans and activities	Review of instructional plans and activities is imbedded in the RPT process. See Addendum.
b) Student feedback on instruction design/activities	Evaluation of instruction is multifaceted and <i>exemplary</i> , as is having a student member on departmental Advisory Council.
3. Instructors	
a) Colleague eval. procedures	
b) Student eval. of instructors	
4. Programs	
a) Internal Review Process	
b) Accreditation	
c) Alumni evaluation	Formal survey/evaluation conducted every 5 years is exemplary, as is the intention to "Conduct annual follow-up of our first-year teachers as resources permit" (see Activity 1--and also Activity 4--under Goal 4 in Attachment I.A.).
d) Evaluation by professionals and advisory board	
e) Comparison with similar programs	See Addendum for information regarding the strengths of the program in comparison with those mentioned.
f) Internal strategic planning	

III. STUDENT CHARACTERISTICS

A. Awards and Honors
B. Placement of Graduates
C. Student diversity, Dean's List, and AP status

IV. PROGRAM ADMINISTRATION

A. Faculty Scholarship	Definition of faculty scholarship, and criteria used, are provided. However, no information is provided regarding the standards employed for determining the degree to which these criteria are met.
B. Prof. Development Expectations	
C. Non-faculty Staff Involvement	See Addendum for information regarding how SAS staff are integral to AgEd 102, as well as the role of the AA as a member of the student teaching seminar team.
D. Resources	
1. Personnel	
2. Fiscal Allocation	Credible amount of outside funding procured.
3. Facilities	Extensive. A strength of the program.
E. Admissions Criteria	
1. Admissions profile	
2. Success of criteria	Suggest developing a systematic approach to this issue, incorporating a sharp focus on a specific measurable definition of student "success."
F. Applicant Pool	
1. Recruitment	
2. Entering student characteristics	
G. Program Capacity	
1. Current capacity	
2. Capacity/enrollment ratio	The program's ability to accommodate more students, given increased staffing, is noted.

V. INSTITUTIONAL STATISTICS

A. Average Fall Quarter Unit Load	
B. SCU generation	
C. Retention/graduation	Informative commentary.
D. FTEF used	

VI. FUTURE PLANS

A. Specifically focused plans	Informative commentary. The Program is encouraged to work towards establishing admissions criteria more broadly reflective of student outcomes.
B. Anticipated external impacts	Good perspective

*Note: Comments are not provided about items for which the information provided indicates a state of affairs that seemed adequate, typical, expected, and appropriate, and about which no particular observations, evaluations, or commentary seemed warranted or helpful to the program.