CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, California 93407
ACADEMIC SENATE

Academic Senate
Tuesday, January 23, 1996
UU 220, 3:00-5:00pm

I. Minutes: Approval of the November 28, 1995 Academic Senate minutes (pp. 2-3)

II. Communication(s) and Announcement(s):

III. Reports:
A. Academic Senate Chair:
B. President's Office:
C. Vice President for Academic Affairs:
D. Statewide Senators:
E. CFA Campus President:
F. Staff Council representative:
G. ASI representatives:
H. Other:

IV. Consent Agenda:

V. Business Item(s):
A. Resolution on Guidelines for Experiential Education-Williamson, Chair of the Curriculum Committee, second reading, (p. 4).
B. Resolution on Proposal to Establish an Urban Forest Ecosystems Institute-Mark, Associate Dean of CAGR, first reading (pp. 5-21).

VI. Discussion Item(s):
The Cal Poly Plan: (pp. 22-47).

VII. Adjournment:
Background Statement: Efforts have been made over the past eight years to develop university guidelines for experiential courses. In 1986-1987, an Ad Hoc Committee on Experiential Education studied the issue and proposed guidelines which were framed in an Academic Senate resolution dated October 1989. The Senate Executive Committee referred the issue to the Curriculum Committee for further study and the committee made "tentative recommendations" in its "End of Year Overview, 1992-93." On October 3, 1994, Jack Wilson, Chair of the Academic Senate, requested the Curriculum Committee to "develop guidelines for 'coop' courses" as part of the committee's charge for 1994-95.

Following review of these previous efforts, the current Curriculum Committee concluded that the issues of major concern were: first, that experiential education should not constitute an inordinate component of a student's course of study; and, second, that grading of students' efforts in these classes is subjective and does not reflect uniform standards for what must be an individualized experience both in conception and execution.

The Curriculum Committee concluded that it was impractical and unwarranted to establish a university-wide limitation on student credit units earned in experiential courses. The committee also concluded that experiential courses should be graded C/NC across the university due to their individualized nature and the lack of university-wide standards of expectation. These recommendations were made in the committee's "Report on Curricular Reform," forwarded to the Senate Executive Committee.

WHEREAS, Experiential education is a complement to the formal curriculum and includes those courses with a significant component of out-of-classroom experience. Such courses may include, but are not limited to, coops, internships, enterprise projects, student teaching, service and club related activities. For purposes of this resolution, such courses are defined as coops, internships, practicum, enterprise projects, and service/club-related activities; and

WHEREAS, Experiential education constitutes a valued part of Cal Poly's curriculum; and

WHEREAS, Such courses call for student design and implementation of course methods and goals; and

WHEREAS, Such courses represent a highly individualized educational experience for the student and raise difficulties in ensuring standardized expectations across the university; therefore, be it

RESOLVED: That grading for experiential courses be on a C/NC basis only.

Proposed by the Academic Senate
Curriculum Committee
May 8, 1995
RESOLVED: That an Urban Forest Ecosystems Institute be established at Cal Poly as proposed in the attached Proposal for the Formation of an Urban Forest Ecosystems Institute.

Proposed by the College of Agriculture
May 11, 1995
Memorandum

To: Harvey Greenwald, Chair  
   Academic Senate

From: Paul J. Zingg  
   Interim Vice President for Academic Affairs

Date: October 16, 1995

Subject: Academic Senate Review of the Proposal to Establish an Urban Forest Ecosystems Institute

Copies: Joseph Jen  
   Wally Mark  
   Susan Opava

Enclosed is a request from Dean Joseph Jen, College of Agriculture, to establish an Urban Forest Ecosystems Institute at Cal Poly. The proposed Institute received conceptual approval by the Academic Deans' Council last spring and was also subject to an administrative review process conducted by Susan Opava, Dean of Research and Graduate Programs.

I would appreciate the Academic Senate's review and recommendation of this proposal. A response would be appreciated by the close of Fall Quarter. If you have any questions, please do not hesitate to either contact me or Dean Jen.

Enclosure
MEMORANDUM

To: Robert Koob
Vice President for Academic Affairs

Date: May 11, 1995

From: Joseph Jan, Dean
College of Agriculture

Copies: S. Opava
W. Mark

Subject: Revised Proposal for the Formation of an Urban Forest Ecosystems Institute

Attached is the revised proposal for the establishment of the Urban Forest Ecosystems Institute at Cal Poly. Also attached are revised bylaws for the operation and structure of the institute and a budget plan for the first four years of operation. This institute appears to be a very viable institute, based on the past level of support received and the number of projects funded for the upcoming year.

The institute clearly reflects an area of excellence at Cal Poly, urban forestry. While many of the projects to date have not involved faculty from multiple disciplines on the campus, the nature of the field of urban forestry should provide such opportunities in the future.

The list of grants received and funding indicates that several faculty in the Natural Resources Management Department have been active doing projects in urban forestry in the past two years. These include Norm Pillsbury, Rich Thompson, Tim O'Keefe, Doug Piirto, and Wally Mark. These grants are an important source of professional development opportunities for the faculty, funding for extra compensation and assigned time, funding for graduate students, office support, and equipment. As such I have agreed to continue to support the effort by releasing my Associate Dean, Wally Mark, 10% of his time to direct the institute and to place a Macintosh computer in the UFEI Office.
The Academic Dean's Council reviewed the original proposal and passed that along for administrative review. My understanding is that this has been completed and that the revisions reflect the input from the administrative reviewers. I understand that the university is willing to provide startup funding for the institute, but that Academic Senate review and approval is required before the institute becomes official.

The establishment of the Urban Forest Ecosystem Institute will provide recognition of the area of excellence that exists at Cal Poly. I hope that you will support the College in this effort by expediting the required approvals.

Attachments
Background & Purpose

Throughout the State and across the nation, there is a growing demand for improved management of urban forest ecosystems. The definition of an urban forest is changing rapidly as population pressures increase the urbanization of historically rural/wildland areas -- the urban interface forest. This is especially true in California where the value of forests from the High Sierras to the coast is being generated increasingly by recreational and vacation homesite uses and less by traditional commodity uses.

The Society of American Foresters has developed the following definition of urban forestry: "Urban forestry is a specialized branch of forestry that has as its objective the cultivation and management of trees for their present and potential contribution to the physiological, sociological, and economic well-being of urban society. Inherent in this function is a comprehensive program designed to educate the urban populace on the role of trees and related plants in the urban environment. In its broadest sense, urban forestry embraces a multi-managerial system that includes municipal watersheds, wildlife habitats, outdoor recreation opportunities, landscape design, recycling of municipal wastes, tree care in general, and the future production of wood fiber as raw material."

As California, and the nation, place greater demands on urban forests, improved management and awareness of these resources is needed. The Natural Resources Management Department, along with other disciplinary areas such as Biological Sciences, City and Regional Planning, Landscape Architecture, Ornamental Horticulture, Political Science, Recreation Administration, and Soil Science at Cal Poly - San Luis Obispo, is ideally suited to address these needs given the philosophy of an ecosystems approach to resource management, expanding interest in interdisciplinary efforts, and location within the highly urbanized areas of Central and Southern California. Cal Poly has curriculum, applied research and faculty competencies in urban forestry and wildland management.

In response to these needs the Urban Forest Ecosystems Institute (UFEI) is proposed for establishment at Cal Poly. The purpose of the proposed UFEI at Cal Poly is to provide a center for (1) applied research on urban forest topics, (2) extension and technology transfer for urban forest areas, (3) community service and outreach programs that will assist landowners and public agencies in improving the management of urban forests and (4) student involvement in research and education activities in urban forestry. The scope of UFEI will range across the full spectrum of forest settings – from the inner-city forests to semi-developed forests, using the broad definition of urban forestry.

Mission Statement

The Urban Forest Ecosystems Institute will conduct applied research on urban forest resources including planning, management, and utilization strategies for those resources. The UFEI will also develop and conduct technology transfer programs related to urban forestry. This will be done by members, associate members, and community liaisons.
Goals

- provide opportunities for faculty, staff and student cooperation and integration by participating in an interdisciplinary effort to develop programs to manage urban forest resources
- provide opportunities for professional, intellectual, and personal growth through applied research and development activities
- analyze, plan and implement activities in urban environments that benefit both human and natural systems
- review literature and state-of-the-art technologies that may be applied to urban forest ecosystems
- provide the opportunity for faculty to apply current research and learning to teaching and instructional programs
- invite the local, regional and national community to participate and promote the transfer of information and technologies through applied research
- conduct cross-disciplinary applied research that will inform the public and decision makers about mitigation, management, and implementation strategies that impact urban forest resources
- develop a computerized data base (including literature) and techniques for resources information distribution
- develop educational programs that will inform the public at large as well as decision makers about the major issues, concerns, and opportunities available to management in the urban forest
- allow interdisciplinary teams the opportunity to work toward a single goal that unifies their research energies
- create an institute of excellence which is widely recognized, self-sustaining, and is complementary to and enriches other programs, activities, and institutes at Cal Poly
- provide a vehicle (workshops, conferences and symposiums) for the exchange of ideas and skills from the physical, biological, social, and economic sciences, as well as engineering and technology, and the arts and humanities.

Objectives

In order to respond to the major urban forest resource management issues, UFEI will draw upon many disciplines present at Cal Poly. Project work will be accomplished through an interdisciplinary initiative of the Natural Resources Management Department at Cal Poly representing the core group of disciplines with others from programs such as Soil Science, Agricultural Engineering, Recreation Administration, Environmental Horticultural Science, City and Regional Planning, Landscape Architecture, Political Science, and Biological Sciences.
Applied research and educational efforts will be based on a philosophy of integrated ecosystems management of the urban environments and resources without adverse impact to the natural systems. Technology transfer will be accomplished through various types of education programs including: conferences, workshops, seminars, publications, and public service announcements.

Examples of more specific objectives for applied research and extension projects will focus on the following urban forest issues:

- Wildfire hazard prediction and fuel management
- Greenbelt/open space management
- Shade tree vigor analysis, selection, and stability prediction (including possible application of the "Specimen Tree Concept")
- Description of best management practices (BMP's) and sustainability of urban forests through improved modeling of urban forest and wildland ecosystems
- Economic analysis of benefits and costs associated with urban forests, wildlands and their management
- Inventory of urban forest resources
- Analysis and recommendation of policies and public opinions designed to achieve community forest goals.
- Riparian corridor inventory and best management practices
- Urban wildlife habitat management
- Utilization of urban trees requiring wood/biomass volume estimation and product market research
- Achievement of urban air and water quality goals through urban forest management
- Urban waste management

The technology transfer and community outreach function will include the following means:

- Special seminars and demonstrations
- Hosting and participating in conferences and workshops at all levels; local, state, and national
- Publication of a UFEI public information series
- Video and slide/tape programs
- On-site training programs
- News articles and public service announcements for mass media
- Development of an information database for access by urban forestry professionals
- Implementation and utilization of new technologies in urban forest inventory, planning, and management
The support of teaching and learning opportunities for Cal Poly faculty and students would be enhanced by:

- Increased availability of information from the UFEI information database
- Interaction with professionals through research and extension activities
- Direct involvement of faculty and students in a variety of research and extension activities which add to the learning experience and professional development
- Employment opportunities for students as student assistants and interns while attending college

Direction and priorities for applied research, extension, technology transfer and outreach activities will be provided by an advisory committee that will be comprised of representatives from various public and private sector organizations such as California Urban Forests Council, California Department of Forestry and Fire Protection, United States Forest Service, National Park Service, Soil Conservation Service, University of California Cooperative Extension, California Urban Forestry Advisory Council, International Society of Arboriculture, Society of American Foresters, East Bay Regional Park, California Oak Foundation, and other conservation organizations.

Organization

MEMBERSHIP: Membership will consist of faculty, staff, and graduate students of Cal Poly with an interest in studying, teaching, working, and researching in urban forest resource issues. In addition consultants, research associates, and others interested in UFEI projects may join as associate members of the UFEI. Cal Poly undergraduate and graduate students may be hired to work on projects.

ORGANIZATION: The Director of the UFEI reports to the Dean of the College of Agriculture. The Director is the overall administrator of the institute, providing support to the various projects undertaken by members. The Director would be responsible for implementation of the recommendations of the Executive Committee. The Director must be a regular Cal Poly faculty member or administrator.

The Associate Director reports to the Director and manages the UFEI Office and is responsible for personnel actions for the UFEI staff. The Associate Director also pursues leads for grants and contracts, organizes conferences, workshops, seminars, and short courses. The Associate Director could be a Cal Poly faculty member or administrator or an individual contracted with by the Institute. The Associate Director would only be hired if sufficient funds were available through the institute.

Each project would have a project director, who would be directly responsible for its implementation, completion, and required reporting and project accounting. Funds would be managed by the Cal Poly Foundation, which would also serve as the funding recipient on behalf of the UFEI. (See attached organization chart)
LOCATION: For the initiation of the UFEI, office space will be provided by the University. The institute will require office space for the Executive Director and administrative assistant/clerical support. Telephones and a computer and printer for the administrative assistant/clerical support will also be provided by the University.

FUNDING: Initial startup funds are requested from the Vice President for Academic Affairs. During the 1993-94 Fiscal Year funds for a one-half time clerical position were obtained from grant moneys. The Associate Vice President for Academic Resources agreed to match this funding during the 1994-95 Fiscal Year to provide for a one-half time support staff for the UFEI office. The institute requests similar funding from the University for the 1995-96 and 1996-97 FY's. It is anticipated that grant funds will provide support to match the one-half time support from the university. In addition, startup funding of 18 WTU's per year for 1994-95, 1995-96, and 1996-97 are requested for faculty assigned time for a director to work on the startup and direction of the UFEI. During this time other required equipment and operating expenses associated with the UFEI office will be provided from grant moneys. After the 1996-97 FY it is anticipated that funding for the clerical and director positions will be generated from grants.

Additional faculty assigned time will be funded on individual grants as they are received. Some faculty may also receive additional compensation from grants administered in the UFEI.
ACTIVITY: There has been considerable activity related to the types of projects that will be supported by the institute in 1993-94. The following is a list of the grants that have been received:

<table>
<thead>
<tr>
<th>Activity 1993-94:</th>
<th>Project Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Forestry Recycling</td>
<td>$18,000</td>
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<tr>
<td>Evaluation of Urban Tree Species for Volume and Biomass Potential</td>
<td>$35,000</td>
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<tr>
<td>Urban Forest Profiles for Sustainability</td>
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</tr>
<tr>
<td>Strategic Planning for Urban Forestry in California Communities</td>
<td>$80,000</td>
</tr>
<tr>
<td><strong>Project Total:</strong></td>
<td><strong>$183,000</strong></td>
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<table>
<thead>
<tr>
<th>Activity 1994-95:</th>
<th>Project Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tahoe Tree Values</td>
<td>$75,000</td>
</tr>
<tr>
<td>Strategic Planning for Urban Forestry in California Communities</td>
<td>$120,000</td>
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<tr>
<td>Urban Forest Tree Utilization</td>
<td>$10,000</td>
</tr>
<tr>
<td>Application of Volume Tables to Existing Street Tree Inventory Data</td>
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</tr>
<tr>
<td><strong>Project Total:</strong></td>
<td><strong>$245,000</strong></td>
</tr>
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| Projected Activity 1995-96: | |
|----------------------------|-
| Cohost Oak Woodland/Urban Forestry Conference | $25,000 |
| Strategic Planning for Urban Forestry in California Communities | $10,000 |
| Application of Volume Tables to Existing Street Tree Inventory Data | $30,000 |
| Information Networking for Urban Forestry | $10,000 |
| Pacific Coast Tree Finder Application | $50,000 |
| **Project Total:** | **$125,000** |

**BUDGET:**

See attached budget proposal.
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<tbody>
<tr>
<td>Faculty Assigned Time (12 wtu/yr)</td>
<td>$6,000</td>
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<td>Staff Salary (part time contractors)</td>
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<td>AOA 1 (half time)</td>
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<td>$7,209</td>
<td>$7,569</td>
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<td>Student/Graduate Research Assistant</td>
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<td>Benefits (28% for AOA; 8% SA/GRA)</td>
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<td>Office Space for Staff &amp; AOA 1</td>
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<td>Cal Poly</td>
<td>Cal Poly</td>
<td>Cal Poly</td>
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<tr>
<td>Computers and printer</td>
<td>Cal Poly</td>
<td>Cal Poly</td>
<td>Cal Poly</td>
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<td>Office Furnishings</td>
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<td>Office Supplies/Operations</td>
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<td>UFEI Grants</td>
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<td>Lake Tahoe Grant</td>
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<tr>
<td>Oak Symposium</td>
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<td>$6,000</td>
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<tr>
<td>Tree Finder</td>
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<td>$5,000</td>
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<td>$5,000</td>
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<tr>
<td>John Bryant</td>
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Figure 1. Organizational Chart for the Urban Forest Ecosystems Institute

Institute Director
(selected by Steering Committee or Executive Council)

Executive Council (7)
- 1- Director
- 1- Associate Director
- 1- NRM Department Head
- 1- Active Research Member
- 1- Active Member
- 1- Active Associate Member
- 1- Member, Advisory Committee

Associate Director
(selected by Director
w/consultation of Exec. Council)

Advisory Committee

Members

Associate Members

UFEI Programs
Program Coordinators
1. J. Bryant, External Degree Program
2. N. Pillsbury, B. Tietje, J. Verner, J. Bryant, Oak Symposium
3. J. Cobb, N. Pillsbury, COWS
and others
 coordinators of projects under UFEI)

Applied Research
Project Directors
1. D. Pilto, Lake Tahoe
2. T. O'Keefe, Leisure World
3. R. Thompson, Sustainability
and others
(directors of Sponsored Program projects under UFEI)

Administrative Office Assistant

Clerical

Student Assistants

Interns and Volunteers
BYLAWS

URBAN FOREST ECOSYSTEMS INSTITUTE

California Polytechnic State University
San Luis Obispo, California

These bylaws are applicable within the authorization established by the Board of Trustees of the California State University (CSU) and the California Polytechnic State University (Cal Poly).

ARTICLE I - NAME

The name of this organization shall be the Urban Forest Ecosystems Institute, referred to in these Bylaws as the UFEI.

ARTICLE II - PURPOSE

Section 1 - Direction: The UFEI is a non-profit, non-partisan organization established for educational, research, and service purposes. The UFEI will promote the study and management of urban forest ecosystems and participate in education and the decision making processes through a combination of interrelated programs of an applied nature involving students, faculty, and community collaboration.

Section 2 - Policies: The policies of UFEI shall be in harmony with the policies of the California State University and the California Polytechnic State University.

Section 3 - Dissolution: In the event UFEI is dissolved, its assets remaining after payment of, or provision for payment of, all debts and liabilities shall be distributed to the Natural Resources Management Department of the College of Agriculture of the California Polytechnic State University, San Luis Obispo.
ARTICLE III - MEMBERSHIP

Section 1 - Class of Membership: Members may be faculty, staff, and graduate students of the California Polytechnic State University, San Luis Obispo, and Associate Members may be consultants, research associates, and others interested in the institute.

Section 2 - Admission to Membership:

a. Eligibility: All interested faculty, staff, and graduate students of California Polytechnic State University, San Luis Obispo, can be Members of UFEI, if so requested by the individual. All Associate Members are required to have written agreements to serve UFEI and its programs.

b. Request for Membership: Any qualifying individual interested in an UFEI program may request membership (see class of membership for criteria for membership).

c. Acknowledgement of Membership: The Director/Executive Director of UFEI shall acknowledge members.

Section 3 - Terms: Terms of members shall be determined by the Executive Committee.

Section 4 - Fees and Dues: Fees or dues may be established upon recommendation of the Executive Committee.

ARTICLE IV - UFEI ADMINISTRATION

Section 1 - Administrators: Administrators shall consist of the Director and Associate Director.

Section 2 - Staff: Staff members are those persons serving the University in an instructional or non-instructional program of UFEI. Staff members shall work under the direction of personnel listed in IV.1.
ARTICLE V - EXECUTIVE COMMITTEE

Section 1 - Composition: There shall be an Executive Council composed of the Director and Associate Director of UFEI, the NRM Department Head, one Member actively involved in research during the past 12 months, one Member in good standing, one Associate Member in good standing, and one member of the Advisory Committee.

Section 2 - Membership: Membership is determined as follows:

a) The Director, Associate Director and the NRM Department Head shall be members of the Executive Council.

b) The Director shall call for nominations for the Active Research Member position on the Executive Council from those who are actively involved in Sponsored Programs, Cal Poly Foundation, research projects or have been involved during the past 12 months. The Executive Council makes the final selection.

c) The Director shall call for nominations for the Member position on the Executive Council from those who are Institute Members in good standing. The Executive Council makes the final selection.

d) The Director shall call for nominations for the Associate Member position on the Executive Council from those who are Institute Associate Members in good standing. The Executive Council makes the final selection.

e) The Advisory Committee shall recommend one Advisory Committee Member for appointment to the Executive Council by the Director.

Section 3 - Meetings: The Executive Council shall, at a minimum, meet once per year. Minutes of the Executive Council shall be submitted to UFEI Members, Associate Members and the Advisory Committee.

Section 4 - Duties: The Executive Council shall provide the general guidance related to the business activities and affairs of UFEI. The Director shall implement those decisions.
Section 5 - Conduct of Meeting: Meetings shall be governed by Robert's Rules of Order, as such rules may be revised from time to time, insofar as such rules are not inconsistent with or in conflict with policies of the CSU and/or Cal Poly.

ARTICLE VI - ADVISORY COMMITTEE

Section 1 - Composition: The Advisory Committee to UFEI shall consist of no more than 10 persons recommended by the UFEI Executive Council and approved by the Dean of Agriculture. Members shall not be regular employees of Cal Poly State University.

Section 2 - Purpose: The Advisory Committee shall provide advice and comment on UFEI programs and shall engage in public relations and fund raising for UFEI programs.

Section 3 - Meetings: The Advisory Committee shall meet at least once a year to review UFEI programs and to provide general direction to UFEI. The Committee may elect to meet for special purposes at any other time, upon agreement of a majority of Committee Members.

Section 4 - Number Constituting a Quorum: A majority of Committee members shall constitute a quorum.

ARTICLE VII - FISCAL POLICIES

Section 1 - Fiscal Year: The fiscal year shall be in accordance with the University.

Section 2 - Accounts and Audit: The books and accounts of the UFEI shall be kept by the Cal Poly Foundation in accordance with sound accounting practices, and shall be audited annually in accordance with University policies.
ARTICLE VIII - OPERATING GUIDELINES

The Executive Committee may develop operating guidelines to implement these Bylaws.

ARTICLE IX - AMENDMENTS

The Bylaws may be amended by a 2/3 vote of the members of the Executive Committee voting at any meeting of UFEI. Each member shall have two (2) weeks advance written notification of the proposed amendments.

WRM:5/11/95
Memorandum

Date: January 3, 1996

To: President Warren Baker,
    Cal Poly Plan Steering Committee

From: Linda C. Dalton, Interim Associate Vice President for Academic Resources

Subject: Progress Regarding Cal Poly Plan, Fall 1995

Before the holidays I offered to begin drafting a document representing progress on the Cal Poly Plan through Fall 1995. At the time I imagined it to be a rather conventional planning report. Following the outline shared with the Steering Committee on December 8, I would work through a discussion of purposes and process; enrollment planning; investments in student progress, quality, productivity and accountability; finance; and the compact with the CSU.

However, as I began drafting I sensed a need for more of a narrative than a report. Thus, I have written the attached document as a progress report regarding what we accomplished during late summer and fall 1995; my sense of where we are at the end of Fall Quarter 1995, and what lies ahead in 1996 and beyond.
CAL POLY PLAN

Keeping Cal Poly's Promise:


prepared by Linda C. Dalton, Ph.D., AICP
Interim Associate Vice President for Academic Resources

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Cal Poly Plan Purposes and Principles

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Cal Poly Plan Accomplishments, Fall 1995

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  Steering Committee
  Campus Information and Constituency Involvement
  Survey Research

Enrollment Analysis

Cal Poly Plan Issues Pending, Winter 1996

  Funding Enrollment Growth vs. Student Progress, Quality and Productivity
  The Significance of a Potential Increment from a Differential Campus-Based Fee
  Investment Analysis and Priorities
  Figure 2, Cal Poly Plan Purposes and Potential Investments
  Fee Scenarios

Defining and Measuring Quality, Productivity, and Accountability

Appendix A-1. Combined Top Ranking from Cal Poly Plan Surveys, Based on Partial
Results (through December 1995).


Appendix B. Cal Poly Plan Purposes and Estimated Costs of Potential Investments.
CAL POLY PLAN

Keeping Cal Poly's Promise:
D R A F T  Progress Report, January 3, 1996

This progress report focuses on work related to the Cal Poly Plan from August through December 1995, subsequent to the project's inception during Spring 1995. Following a brief review of the purposes of the Plan, this report addresses accomplishments to date, issues to be resolved during Winter 1996, and longer-term objectives.¹

Cal Poly Plan Purposes and Principles

The Cal Poly Plan is a focused planning effort to address the simultaneous challenges of public scrutiny, increasing demand, and limited state support for higher education. The Plan is primarily concerned with reinforcing the quality of education upon which Cal Poly's reputation is based and with preparing graduates for the 21st century. As such, the Plan is a means toward achieving the promise of the University's Strategic Plan adopted in 1994.

Cal Poly Mission

As a predominately undergraduate, comprehensive, polytechnic university serving California, the mission of Cal Poly is to discover, integrate, articulate, and apply knowledge. This it does by emphasizing teaching; engaging in research; participating in the various communities with which it pursues common interests; and where appropriate, providing students with the unique experience of direct involvement with the actual challenges of their disciplines.

Cal Poly is dedicated to complete respect for human rights and the development of the full potential of each of its individual members. Cal Poly is committed to providing an environment where all share in the common responsibility to safeguard each other's rights, encourage a mutual concern for individual growth and appreciate the benefits of a diverse campus community.

California Polytechnic State University Strategic Plan, 1994

President Warren Baker's keynote address to the Cal Poly community in September 1995 identified the following central concepts of the Cal Poly Plan:²

Preservation -- The Cal Poly Plan will be guided by a commitment to preserve and enhance Cal Poly's polytechnic mission and its distinctive learn-by-doing tradition.

Access -- The Cal Poly Plan will provide for expanded student access -- expanded access by a growing, diverse student population to a Cal Poly education, expanded access

¹ I have written this progress report as a narrative, occasionally using the first person where applicable. The narrative reviews the work of the Steering Committee and its constituent groups, and participation by the Cal Poly community during Fall 1995. In addition, I refer to the technical work of a number of analysts from several divisions in the University, particularly Stephan Lamb and George Stanton in Student Affairs, Rick Ramirez in Administration and Finance, Euel Kennedy and John Anderson in Enrollment Support Services, Susan Currier and Kimi Ikeda in Academic Affairs, and Elaine Ramos-Doyle and Bonnie Krupp in Institutional Studies. Finally, Brent Keetch and Dan Howard-Greene contributed significantly to written and electronic communications throughout Fall quarter.

² Material for this section was drafted by Dan Howard-Greene.
by those students to instruction, and expanded access to academic, student, and institutional support services.

Productivity -- The Cal Poly Plan will support efforts to increase student, staff, and institutional productivity. It will encourage activity to aid student learning, retention and progress to degree, efforts to capitalize faculty and staff (in order to strengthen their ability to deliver effective programs and services), and initiatives to use the university's fixed costs and physical assets more efficiently.

Quality -- The Cal Poly Plan will encourage initiatives to restore and enhance the quality of instructional programs, and of academic, student, and institutional support services.

Accountability -- The Cal Poly Plan will provide for development and application of definitions, criteria, and measures to assess overall institutional success in promoting access, productivity, and quality; and evaluate the effectiveness of Cal Poly Plan initiatives in promoting access, productivity, and quality.

Funding -- Through the Cal Poly Plan, the University will enter into a compact with students, parents, and private donors in order to obtain the differential funding required to achieve the purposes of the Cal Poly Plan. This includes consideration of a special campus-based fee at Cal Poly.

Subsequent discussions led to the refinement of these concepts into the following linked purposes and goals which support the Cal Poly mission. Cal Poly Plan investment and finance strategies will develop the means for achieving these goals.

In addition, the Steering Committee, deans, and vice-presidents developed a set of guiding principles for the Cal Poly Plan as fall discussions progressed. Figure 1 summarizes these planning and decision-making principles and criteria.

The California State University Chancellor's Office supports the development of the Cal Poly Plan because the system is interested in exploring different ways campuses can meet the challenges facing higher education as we approach the 21st century. Thus, Figure 1 also lists the emerging understandings with the Chancellor's Office regarding the Plan.
### Planning

**Process Principles for Cal Poly Plan:**
- Build on prior committees and planning efforts;
- Consult with those whom Cal Poly serves:
  - Media announcements and presentations,
  - Surveys,
  - Focus groups,
  - Forums;
- Continue Steering Committee and Involvement of Vice-Presidents and Deans to monitor progress regarding student progress to degree, quality, enrollment growth, funding, investments, and improvements in efficiency and productivity;
- Develop an analytical base to support deliberations about priorities, to enable future monitoring and assessment of success, and to facilitate transferability.

### Enrollment

**Enrollment Principles for Cal Poly Plan:**
- Return 15,000 full-time equivalent students (FTES) for the academic year (Cal Poly's Master Plan level) over the next three to five years (about 17,000 students);
- Rebuild summer enrollment;
- Consider master plan improvements to accommodate future enrollment growth to 17,400 AY FTES.

**Key Enrollment Choices Remaining:**
- Distribution of enrollment growth by level and program, applying the following:
  - Cal Poly's mission with respect to the program mix,
  - Diversity/representation,
  - Demand for graduates,
  - Facilities & equipment -- quality & capacity,
  - Staff/Service capacity,
  - Student and applicant quality,
  - Needs of the State of California,
  - Academic program/Teaching capacity,
  - Community and environmental impacts.

### Finance and Investments

**Finance and Investment Principles for Cal Poly Plan:**
- Continuing state support for enrollment growth;
- Recognition of quality and costs associated with Cal Poly mission ("learn by doing");
- Affordability -- financial aid sufficient to provide at least the same level of support as at present;
- Access for an increasingly diverse student population;
- Any new campus-based fee supplementary to other sources of revenue in the General Fund operating budget;
- Level of any new campus-based fee derived from the level of investment necessary to make a demonstrable difference toward student progress and educational quality;
- Revenues from any new campus-based fee to be invested solely in visible (identifiable) quality and productivity enhancements (including student progress toward degree completion);
- Fiscal flexibility;
- Some priorities to be addressed without financial investments.

**Key Investment Choices Remaining**
- Priorities for allocation of campus-based differential fee, considering the following:
  - Ability to achieve Cal Poly Plan purposes and goals rather than pro rata allocation based on a unit's historic proportion of the campus budget,
  - Findings from surveys of students, faculty, staff, parents, alumni, and advisory groups,
  - Assessment of needs by divisions and colleges.

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Finance and Investments (continued)

Key Investment Choices Remaining (continued)
- Incentives and support sufficient to encourage faculty and staff experimentation, and innovations in student learning,
- Broad rather than narrow benefit to students,
- Immediate impact as well as long-term value of investments,
- Ongoing obligations as well as fixed-term investments,
- Indirect support costs associated with selected investments,
- Sequencing of investments in initial and future years.

Key Finance Choices Remaining:
- Level of campus-based fee;
- Campus-based fee structure;
- Financial aid structure, pending Board of Trustee approval.

Process for Defining and Building Quality, Productivity, and Accountability

Principles Regarding Process for Quality, Productivity and Accountability:
- Involvement of campus constituents in defining and measuring quality and productivity;
- Accountability at institutional and program levels;
- Linkage between planning, resource allocation, and performance;
- Continuing investments in quality and productivity:
  - Student productivity -- More effective student learning; retention and progress toward degree goals; curricular flexibility,
  - Institutional productivity -- More effective use of fixed resources;
  - Individual faculty and staff productivity -- Capitalization of faculty; innovation in meeting responsibilities.

Key Choices Remaining Regarding Process for Quality, Productivity and Accountability:
- Structure and schedule for continuing dialog to define quality and productivity, to develop accountability measures for both, and to create internal links between performance and resource allocation.

Mutual Understandings between Cal Poly and CSU

Core themes established during summer 1995:
- Cal Poly Plan as a unified whole whose parts are inter-related and should not be unilaterally altered;
- Enrollment decisions about student mix based on sound academic reasons and the Cal Poly Strategic Plan goals (including diversity and affordability);
- State appropriations and state university fees allocated for enrollment growth or quality enhancement not to fall below system-wide averages during the investment period for the Cal Poly Plan. Long-term financial arrangements to assure that Cal Poly can maintain the resources to preserve its polytechnic mission;
- Chancellor's Office to work with Cal Poly regarding financial aid policies and their impact on student access and campus revenues;
- Cal Poly and the Chancellor's Office to work together to develop definitions of costs, baselines, and timelines for assessing the fiscal impact of the Cal Poly Plan.

In addition, Cal Poly was encouraged to pursue the following:
- Fiscal flexibility, including the pursuit of other revenue sources and control the expenditure of new revenues generated through the Cal Poly Plan;
- Employee relations with respect to supplemental collective bargaining agreements;
- Initiatives to enhance institutional, student and faculty/staff quality and productivity;
- Process assessment to improve the quality and effectiveness of campus services;
- Curricular issues, including general education, articulation, and degree approval; and
- Capital improvements to accommodate future enrollment beyond 15,000 AY FTES.

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Cal Poly Plan Accomplishments, Fall 1995

Fall Quarter's accomplishments focus first on process -- linkages with past and concurrent planning efforts, constituency consultation, and increasing campus understanding of the need for a Cal Poly Plan. Further, administrative analysts prepared studies of Cal Poly Plan issues such as enrollment and financial conditions.

Linkage with Earlier Initiatives and Concurrent Planning Activities

From the outset, the Cal Poly Plan process has built on the Strategic Plan adopted in 1994 and work of charter university committees -- particularly the governance, financial management and employee relations reports prepared during 1994-95. In addition, the process incorporates a number of recent and concurrent studies in different divisions: e.g., "Visionary Pragmatism," general education, throughput, program review, educational equity, and quality improvement.

Steering Committee

President Baker formed the Cal Poly Plan Steering Committee during Summer 1995. He asked the members to help formulate the issues to be addressed, to communicate to and from their constituencies, and to develop a consensus on the principles the Cal Poly Plan would apply. The Steering Committee draws together established elements of consultation at the University through its representation from the Academic Senate, ASI, Staff Council, and Labor Council. In addition, the President asked the deans and vice-presidents to contribute to the development of the plan, considering university-wide issues as well as implications for their colleges or divisions. Thus, through these groups and individuals the Cal Poly Plan integrates a consultative process and the management structure of the University.

The Steering Committee began meeting extensively during Fall with a rather ambitious agenda. The Committee reviewed data about enrollment and financial issues, examined survey findings, and discussed emerging principles. In addition, members began to deliberate about priorities to be met by the Cal Poly Plan.

Campus Information and Constituency Involvement

President Baker introduced the campus to the need for a Cal Poly Plan during Spring 1995 with a short "Outlook" publication and a series of meetings with student, faculty, and staff groups. Very early, Steering Committee members assumed responsibility for providing information and promoting understanding about the Plan.

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3 Members include President Warren Baker as chair; vice presidents Paul Zingg, Juan Gonzalez, Frank Lebens; Academic Senate representatives Harvey Greenwald, John Hampsey, Jack Wilson; ASI representatives Cristin Brady, Mike Rocca, Tony Torres; Staff Council representatives Eric Doepel, Pat Harris, Bonnie Krupp; and Labor Council representative George Lewis.
President Baker spoke about "Keeping Cal Poly's Promise" at Cal Poly's Fall Conference opening session for faculty and staff. His expanded remarks were published and distributed throughout the campus.

Postcards and questions during CAPTURE registration for Fall 1995 briefly called the Cal Poly Plan to all students' attention. Postcards and questions during CAPTURE registration for Winter 1996 briefly reminded all students about the Cal Poly Plan.

The Mustang Daily carried a series of articles by reporter Rebecca Starrick. In addition, the Daily occasionally published editorial columns, letters to the editor, and advertisements for events related to the Cal Poly Plan.

Each instructional college sponsored a forum for its students, faculty and staff for discussion of the Cal Poly Plan.

Student, faculty, and staff members of the Steering Committee met frequently with constituent groups to discuss the Plan.

Flyers announcing forums and meetings were distributed broadly. Participants in forums and meetings received summaries of the challenges and opportunities to be addressed by the Plan and of emerging principles being developed by the Steering Committee.

Faculty and staff sponsored several focus groups to discuss issues associated with the Plan, particularly addressing how quality education might be defined and measured.

The e-mail account polyplan@oboe was established for inquiries and suggestions about the plan. To date about 20 messages have been exchanged.

On November 28, the Academic Senate adopted a resolution encouraging the University to continue work on the Plan, subject to some important conditions regarding protection of the University's base budget and state support for enrollment growth, and control over the expenditure of all new revenues generated by the Plan.

Survey Research

To complement group discussion of issues associated with the Cal Poly Plan, the campus sponsored a series of systematic surveys to assess opinion on the quality of education at Cal Poly and priorities for investments. The Steering Committee also had access to earlier surveys, such as the Student Throughput Study, and Student Needs and Priorities Survey.

Fall and Winter CAPTURE registration surveys asked each student to answer one of a rotating series of questions about key issues, such as interest in summer enrollment.
A stratified cluster sample of classes reached 885 students with an extensive questionnaire.

The Academic Senate distributed an extensive questionnaire to all faculty and professional consultative services staff. About 350 responded.

The Human Resources office distributed a questionnaire to all state-funded, Foundation and ASI employees. As of December 432 responses had been received.

The Student Affairs Assessment and Testing Office distributed questionnaires to honored alumni, members of advisory groups, and a sample of parents of current students. By the end of December 34 honored alumni, 267 advisory group members, and 306 parents had responded.

Appendix A-1 contains a summary of investment priorities emerging from these surveys. Appendix A-2 contains a selection of additional survey findings.
Enrollment Analysis

Analysts in Institutional Studies and Enrollment Support Services developed data showing enrollment trends at Cal Poly. Discussions underscored how enrollment had declined during the early 1990s when budget reductions occurred, and how public demand for higher education is expected to increase as we approach the 21st century. The campus reached a peak of about 15,300 Academic Year Full-Time Equivalent Students (and 1400 for summer, annualized) in 1990-91, and then reduced its enrollment when state budget reductions occurred in order to avoid erosion of educational quality. Currently, Cal Poly projects about 14,150 AY FTES for the 1995-96 year.

The Steering Committee and deans and vice presidents discussed several future enrollment scenarios:

- Possibilities for 1996-97 include the following:
  - No growth (retaining a College Year enrollment of about 14,800 Full Time Equivalent Students);
  - Matching the system-wide growth rate of 1 percent (adding about 150 new CY FTES); or
  - Moderate growth of 1.5 to 2 percent to maintain the size of the entering class (effectively adding about 225-275 new CY FTES because entering cohorts are currently larger than graduating cohorts as Cal Poly recovers from the enrollment decline during the previous five years).\(^4\)

- Longer enrollment projections focus on three issues: how soon Cal Poly might return to (or exceed) its master plan capacity of 15,000 AY FTES; how much summer enrollment might grow; and student course load.
  - At a moderate annual growth rate of 1.5 percent, Cal Poly would reach 15,000 AY FTES in 4 years (by 1999-2000); at 2 percent AY enrollment would reach 15,000 FTES in 3 years. In contrast, at the system-wide growth rate of 1 percent, Cal Poly would reach 15,000 AY FTES in 6 years (2001-02).
  - Increasing summer enrollment would allow Cal Poly to use its physical resources more efficiently. If summer enrollment were to grow by the same number of CY FTES as the academic year, then a 1 percent AY growth in FTES would require an increase of about 150 CY FTES in summer. At this rate summer enrollment would reach its previous peak of 1400 CY FTES in five years.

\(^4\) The Steering Committee also discussed a maximum growth scenario of over 3 percent (adding about 500 new CY FTES, with a significant portion of this increase during summer quarter). Later discussion showed this scenario to be unrealistic given the gearing up that would be required to expand summer quarter this quickly. Also, the 1996/97 CSU Trustees' budget assumes maximum system-wide growth at 1 percent (about 2000 FTES for all CSU campuses).
Student course load during the academic year has been increasing modestly during the past five years, from 13.71 in Fall 1990 to 14.02 in Fall 1995 for undergraduates. If this trend continues, then student head count does not have to increase as rapidly as FTES to achieve a desired increase in enrollment. For example, increasing average student load during the academic year by 0.1 units per quarter is equivalent in FTES to adding more than 100 additional students at the lower course load. Increasing student load serves several objectives, such as decreasing time to degree completion and reducing the impact of services that are oriented to the number of individual students, including advising, residential needs, and community impacts. Increasing the size of the average graduating class decreases the average length of stay of students, which then allows more room for new students.

- Enrollment impacts received only limited discussion to date. All constituencies expressed some concern about the availability of resources to meet the needs of a larger student body. Specific issues raised include class availability, support staff for student services, faculty office space, parking, and student residential needs.

- More immediate issues deferred discussion of future growth beyond the master plan level of 15,000 AY FTES. Yet, advance planning for the physical master plan of the campus requires attention to future enrollment so that appropriate capacity can be included in capital budget requests. Cal Poly’s Strategic Plan adopted in 1994 included a principle of planned growth given sufficient resources and attention to the campus environment and community relations. The Strategic Planning process examined a future maximum enrollment of 17,400 AY FTES by the 2005-06 year, with summer enrollment at 2600 FTES (annualized). These discussions also contemplated that enrollment growth should occur in discrete phases rather than by an even annual percentage increase.
Cal Poly Plan Issues Pending, Winter 1996

At the end of Fall Quarter the Steering Committee had just begun discussions regarding potential investment priorities for the Plan and funding scenarios. The relationship between finance and investment discussions has proven challenging for several reasons.

Funding Enrollment Growth vs. Student Progress, Quality and Productivity

First, participants have had conceptual difficulty distinguishing between financing enrollment growth and financing improvements in student progress and quality. The principles in Figure 1 state clearly that new state funds and state university fee revenues will be used to support enrollment growth, so new resources from a differential Cal Poly Plan fee can be devoted exclusively to student progress, quality enhancements, and productivity improvements. However, the two issues remain related, in part because CSU allocations for enrollment growth no longer acknowledge differential costs by campus, associated with varying program mixes and costs. Thus, the average system-wide allocation for new enrollment is lower than Cal Poly's average instructional cost. Nevertheless, Cal Poly is able to support new enrollment at this lower allocation so long as the marginal cost of new enrollment does not exceed state fund and state university fee revenues from growth. This relationship will pertain so long as Cal Poly can serve new enrollment without have to substantially increase physical plant and general services costs, and so long as Academic Year enrollment growth does not exceed 10 percent overall. Keeping the marginal cost below the average cost also underscores the importance of institutional productivity (e.g., expanding summer enrollment) and making other productivity improvements to enable the campus to meet student needs more effectively.

Second, some improvements in student progress to degree are expressed as enrollment growth. For example, if current students increase their course load by 0.1 units per quarter, they generate about 100 CY FTES (as noted above in the enrollment section). It would take approximately four faculty to teach the number of classes represented by this increase in load. Yet, the cost of these positions can be supported by state funds because they represent an increment in enrollment; and, if present students graduate more expeditiously, then Cal Poly can admit new students to replace them.

Third, Cal Poly's willingness and ability to increase enrollment -- access to a Cal Poly education -- has been part of the negotiation with the CSU about the Cal Poly Plan. This is consistent with the compact between the CSU and Governor Wilson -- that establishes, in part, a 1 percent annual growth in enrollment for a 4 percent annual increase in funds for higher education over the next three years. Given Cal Poly's reputation and historic demand by applicants, Cal Poly should contribute an appropriate share to the enrollment growth for the CSU.

For these reasons, I find it more straightforward to note provisions for meeting enrollment growth in charts along with Cal Poly Plan investments in student progress and quality.

The Significance of a Potential Increment from a Differential Campus-Based Fee

When Cal Poly experienced budget reductions during the early 1990s, enrollment was deliberately reduced as well to minimize the effects on educational quality. Nevertheless, the campus had to undertake measures that could affect quality in the long-run, such as...
faculty and staff reductions, delay in equipment replacement, diminished operating budgets, and deferred maintenance. The Cal Poly Plan is concerned with making investments to enhance quality to assure that we provide state-of-the-art education for our students as well as to recover from the effects of past reductions. The campus will continue to depend on the state General Fund as its primary source of operating revenues; however, the Cal Poly Plan also recognizes that these revenues are unlikely to be sufficient to maintain the quality of education upon which the campus reputation is based.

A differential campus-based fee is one way to support investments in educational quality. The Finance and Investment principles in Figure 1 underscore that any new campus-based fee would supplement other General Fund resources, that it would be used for visible improvements in student progress and quality, and that the fee would be sufficient to make a demonstrable difference for our students. Thus, the level of the fee would be derived from the analysis of investments required to meet priorities from surveys of the campus community and to fill needs identified by divisions and colleges to make the necessary improvements.

However, participants in the process (Steering Committee, vice-presidents and deans, and campus community at large) need a realistic basis to understand what kinds of improvements might be feasible. In particular, the process runs the risk of overly raising expectations of the campus community about what a fee might accomplish. Further, a key Finance and Investment principle in Figure 1 (established very early) calls for maintaining affordability through a new financial aid program. Yet, the extent of financial aid requirements depends upon fee levels. For these reasons, administrative staff prepared some fee options for use in the student and parent surveys and to estimate the magnitude of the increment to revenues that a campus-based fee might be able to generate.

The following diagram depicts the relationship between potential investments and a proposed fee: Investments in student progress, quality, and productivity are the primary drivers of the fee structure and level. Nevertheless, expectations about the level and nature of the fee, particularly its cumulative magnitude, inform the discussion of investments as well.

**Investment Analysis and Priorities**

In anticipation of discussions of Cal Poly Plan priorities, deans, directors and vice-presidents developed preliminary estimates of how their units might contribute explicitly to meeting the purposes of the Cal Poly Plan: student learning and progress toward degree completion, quality renewal and enhancement, and productivity. In the meantime,
administrative analysts coded and summarized survey findings to reflect the priorities of different campus constituencies for student progress and quality improvements.

At this point, potential investments need further examination for several reasons:

First, the deans, directors, and vice-presidents prepared their preliminary estimates prior to the availability of the survey findings. Consequently, some of their proposals do not anticipate survey priorities -- e.g., in the areas of teaching effectiveness, academic advising, and staff professional development, three areas that received significant attention in the surveys. Also, some divisional proposals did not have direct survey counterparts -- e.g., central computing equipment and campus safety. (Appendix B shows an attempt to match the division and college submittals in November with survey priorities and Cal Poly Plan purposes and goals.)

Second, the Steering Committee had only limited time to explore the implications of the survey findings and investment implications prior to the Holidays.5

Third, potential investments need careful scrutiny with respect to the principles listed in Figure 1, especially with respect to their demonstrable ability to meet Cal Poly Plan purposes and goals, incorporation of incentives for experimentation, consideration of immediate as well as long-term impact, one-time vs. ongoing obligations, and sequencing.

Figure 2, Cal Poly Plan Purposes and Potential Investments, illustrates a possible framework for integrating investment priorities with survey findings. This framework and the principles in Figure 1 could provide the basis for a Request For Proposals to which the deans, directors and vice-presidents could be asked to respond. Thus, the divisions and colleges would be asked to revise their November submittals in light of the Cal Poly Plan principles and the survey findings. Further, the deans, directors and vice-presidents would need to focus their proposals on efforts to meet the Cal Poly Plan purposes, and to submit evidence of how the impact of their proposals could be measured with respect to student progress, quality, and productivity (how will we and they know that they have succeeded). Finally, these responses could be seen as applicable only to the first year of implementation of the Cal Poly Plan.

Fee Scenarios

As noted above, any resolution of an appropriate fee is premature, pending further consideration of investments in student progress, quality, and productivity. Nevertheless, the Steering Committee needs to narrow the parameters of the discussion. If the Steering Committee decides to use an RFP process for the divisions and colleges, it would be helpful to set some parameters about the amount of revenues for which units might apply.

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5 During the December 8 Steering Committee meeting, the following list of potential investments emerged from the discussion: library resources and access, modem access, staff support, advising, instructional equipment, experiential learning, outreach, and assistants for faculty. However, committee members noted later that faculty positions were not listed (despite access to classes being the first priority for students and parents). The subsequent discussion suggested that investment in tenure-track faculty might be delayed to a second year to allow for recruitment. On another note, further perusal of the survey findings shows a preference for instructional equipment, electronic access and software for classes, which is not the same as modem access.
Figure 2. Cal Poly Plan Purposes and Potential Investments

<table>
<thead>
<tr>
<th>Potential Investment Categories and Top Ranked Areas from Surveys</th>
<th>STATE SUPPORT</th>
<th>CAMPUS-BASED FEE SUPPORT to meet CAL POLY PLAN PURPOSES, emphasizing student learning -- preparing graduates for the 21st century</th>
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<td></td>
<td>Enrollment Growth</td>
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<td>FINANCIAL AID</td>
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<td>INSTRUCTIONAL PROGRAMS</td>
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<td>Instructional Effectiveness</td>
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<td>INSTRUCTIONAL SUPPORT</td>
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<td>STUDENT PROGRAMS AND SERVICES</td>
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<td>Career Planning and Placement</td>
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<td>TECHNOLOGY AND EQUIPMENT</td>
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<td>Instructional Equipment (inc. maintenance)</td>
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<td>Computer Technology/Equipment</td>
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<td>FACILITIES AND CAMPUS ENVIRONMENT</td>
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<td>Teaching Facilities (labs/classrooms)</td>
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At the December 8 Steering Committee meeting, administrative staff suggested the following characteristics for a Cal Poly Plan fee: an undesignated, mandatory, campus-based fee to take effect in Fall 1996. Undesignated means that fee revenues would not be permanently ear-marked for any specific program, although they would have to be used to support Cal Poly Plan purposes and goals exclusively. Mandatory means that all students would be subject to the fee, except for waivers. In addition, administrative staff proposed that the fee not be consolidated with other fees. Further, administrative staff recommended that to be fair, simple, and not induce undesirable student behavior, the campus-based fee be charged per unit, up to a level of 12 units per quarter.

Administrative staff presented an analysis showing a proposed Cal Poly Plan fee of $15 per unit for illustration. However, other levels may be considered, as well as phasing in a fee (on an explicit schedule). Thus, the following scenarios emerge:

- **Possibilities for 1996-97 include the following:**
  - No new campus-based fee (focusing any improvements in student progress, educational quality, and productivity on priorities that can be addressed without major financial commitments). This scenario could be used to defer implementation of any of the following fee scenarios by one year.
  - Implementation of a $5 undesignated fee per unit (maximum of $180 per academic year), representing approximately a 10 percent fee increase (a level consistent with increases in system-wide fees in recent past years). This scenario would generate about $2.6 million in new revenues before any allocation to financial aid. This could be the first step in a two- or three-stage implementation of a larger fee.
  - Implementation of a $7.50 undesignated fee per unit (maximum of $270 per academic year) representing approximately a 15 percent fee increase. This scenario would generate about $3.95 million in new revenues before any allocation to financial aid. This could be the first step in a two-stage implementation of a larger fee.
  - Implementation of a $15 undesignated fee per unit for lower division undergraduates and first-year graduate students (maximum of $540 per academic year), representing approximately a 30 percent fee increase for those students. This scenario would generate about $3.2 million in new revenues before any allocation to financial aid. This could be the first step in the staged implementation of a fee focusing on new students.
  - Implementation of a $15 undesignated fee per unit for all students except for those with senior status and second-year graduate students (maximum of $540 per academic year), representing approximately a 30 percent fee increase for those students. This scenario would generate about $3.6 million in new revenues before any allocation to financial aid. This could be the first step in the staged implementation of a fee, excluding those least likely to benefit during the initial year of implementation.
- Implementation of a $15 undesignated fee per unit for all students (maximum of $540 per academic year), representing approximately a 30 percent fee increase. This scenario would generate about $7.9 million in new revenues before any allocation to financial aid.

- Another alternative would be a designated technology fee. Campus estimates suggest a level of $75-100 per academic year. This scenario would generate a maximum of $1.5 million. Such a fee would be ear-marked for technology improvements and thus not available for other improvements in student progress, educational quality, or productivity.6

- Finally, Cal Poly might consider implementing the CSU Trustee policy of charging a differentially larger fee for graduate students.

• Possibilities for future years include future phases of any fee scenario that is only partially implemented in 1996-97. Phasing could involve an explicit plan to gear up during 1996-97 and then fully implement the Cal Poly Plan in 1997-98. Thus, students and parents would be informed about the future fee schedule at one time, and investment decisions could be made for the initial and future years based on the level of revenues forecast for each phase.

6 This fee level would be sufficient to support some technology investments, but not modem access, estimated at an additional cost of nearly $13/month ($156 annually) from a private provider.
Defining and Measuring Quality, Productivity, and Accountability

A number of discussions during Fall Quarter by the Steering Committee, focus groups, and forum participants raised questions regarding the definition of quality and the meaning of terms like productivity and accountability in an academic setting. Indeed, some Steering Committee members questioned how discussions of investment priorities could proceed without some common expectations about these terms. At least three possibilities can be pursued concurrently in the short-run:

- First, if the Steering Committee is comfortable with an RFP process to determine specific Cal Poly Plan investments, then the divisions and colleges might be given the responsibility to show how they would define and measure quality and productivity for the funds they request. In other words, divisions and colleges would be asked to take the initiative in defining and measuring these terms.

- Second, the Steering Committee can begin analyzing the focus group discussions and the open-ended responses to questions about quality in the faculty and staff surveys. These materials provide a rich resource regarding how faculty and staff currently use these terms, especially quality.

- Third, as part of the Cal Poly Plan the University can initiate a broader process for involving the campus community in defining and measuring quality and productivity, as contemplated in the principles listed in Figure 1.

The broader process could begin at the same time as we ask divisions and colleges to take the initiative during the first year of implementation of the Cal Poly Plan. An advantage of the broader approach is that it could encompass a self-educating process to expand faculty and staff concepts of quality (much like that followed by the "Visionary Pragmatism" committee), and lead to a much broader understanding of and commitment to quality and productivity. It should enable the University to explore new teaching and learning paradigms as ways both to enhance educational quality and to improve individual productivity.

Further, a longer process will allow for the incorporation of appropriate accountability measures, which will require some time for experimental development and testing. The campus already employs a number of ways that we examine quality and hold ourselves accountable: e.g., retention and graduation rates, grades and test scores, placement in jobs and graduate programs, course evaluations, peer review, program review, accreditation, financial audits. However, these internal and external measures have not been articulated into a unified approach that enables us to demonstrate the quality of education at Cal Poly at the same time as we further efforts to improve the education we offer. Finally, such a process would lead to more explicit linkage between planning, resource allocation and performance (again as contemplated in the Cal Poly Plan principles).
Appendix A-1. Combined Top Ranking from Cal Poly Plan Surveys, Based on Partial Results (through December 1995)

<table>
<thead>
<tr>
<th>Item</th>
<th>Rank by FACULTY Ranking among Five Highest Priorities</th>
<th>Rank by FACULTY Score for Increasing Quality and Productivity</th>
<th>Rank by STAFF Score for Increasing Quality and Productivity</th>
<th>Rank by STUDENT Score for Importance</th>
<th>Rank by ADVISORY GROUP Score for Increasing Funding</th>
<th>Rank by Honorae ALUMNI Score for Increasing Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number returned</td>
<td>number of items in initial list</td>
<td>date of results reported</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>350</td>
<td>350</td>
<td>432</td>
<td>885</td>
<td>206</td>
<td>267</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>57</td>
<td>28</td>
<td>24</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>57</td>
<td>28</td>
<td>24</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>21-Nov</td>
<td>21-Nov</td>
<td>21-Nov</td>
<td>21-Nov</td>
<td>19-Dec</td>
<td>19-Dec</td>
</tr>
<tr>
<td></td>
<td>19-Dec</td>
<td>19-Dec</td>
<td>19-Dec</td>
<td>19-Dec</td>
<td>19-Dec</td>
<td>19-Dec</td>
</tr>
</tbody>
</table>

INSTRUCTIONAL PROGRAMS

Classes

- major classes: 5, 17, 1, 3
- GEB classes: 7, 40, 9, 2

Summer Classes

- summer major classes: 3, 4, 9, 2

Instructional Assistance/Improvement

- teaching effectiveness: 32, 2, 5, 2, 1, 1
- time for course development: 12
- graders/student assistants: 8, 14*
- reduced teaching load: 4, 22
- teaching assistants: 23*
- reduce class size: 4, 26*

Learn by Doing: 28, 4, 17*, 5, 3, 6

INSTRUCTIONAL SUPPORT

Library

- library resources: 6, 2*, 5*, 5*
- library hours: 5*, 7*, 5*

FACULTY AND STAFF

Professional Development: 19*, 6

Faculty

- tenure-track faculty: 1, 1
- release time for research: 9, 31
- travel/professional meetings: 13

Staff Support: 39

- technical/computer support: 10
- clerical/administrative support: 23*, 21

FACULTY-STUDENT INTERACTION: 9*, 13*

STUDENT PROGRAMS AND SERVICES

Student Services

- career planning/placement: 47*, 2*, 5*, 6, 6, 7

Advising

- academic advising: 44, 5*, 4, 8
- academic assistance: 47*, 15*, 20*, 11, 8, 8

On-campus Housing: 50*, 18*, 10*, 10

TECHNOLOGY AND EQUIPMENT

Equipment (general)

- equipment maintenance (general): 10, 5*
- faculty equipment (inc. computers): 8
- department office equipment: 14*, 16

Computer Technology/Equipment

- computer labs: 30, 7*, 10*
- computer lab assistance: 11*, 10*, 5, 2

Instructional technology access for classes: 16, 4, 11*, 13*, 3, 2, 4
Appendix A-1. Combined Top Ranking from Cal Poly Plan Surveys, Based on Partial Results (through December 1995)

<table>
<thead>
<tr>
<th>Item</th>
<th>Rank by FACULTY Score for Increasing Funding</th>
<th>Rank by STAFF Score for Increasing Quality and Productivity</th>
<th>Rank by STUDENT Score for Importance</th>
<th>Rank by PERFORMANCE Score for Increasing Funding</th>
<th>Rank by ADVISORY GROUP Score for Increasing Funding</th>
<th>Rank by HONORED ALUMNI Score for Increasing Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>number returned</td>
<td>±350</td>
<td>±350</td>
<td>432</td>
<td>885</td>
<td>885</td>
<td>306</td>
</tr>
<tr>
<td>number of items in initial list</td>
<td>57</td>
<td>57</td>
<td>28</td>
<td>24</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>date of results reported</td>
<td>15-Nov</td>
<td>15-Nov</td>
<td>16-Dec</td>
<td>21-Nov</td>
<td>21-Nov</td>
<td>19-Dec</td>
</tr>
<tr>
<td>new computer equipment</td>
<td>2*</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>software</td>
<td>7</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>computer maintenance</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>computers/equipment for majors</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>information technology/networks</td>
<td>19*</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>basic computer training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>imaging, scanning, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAN support</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>data access (e.g., Project ODIN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FACILITIES AND CAMPUS ENVIRONMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lab availability</td>
<td>21</td>
<td></td>
<td>4</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>classroom maintenance</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>additional classrooms</td>
<td>14*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Generally, the top ten items are listed for each survey, except for the faculty survey which had an initial list much longer than the others.

Denotes items which ranked among the top five for a particular group (top ten for faculty given longer list of items to rate).

* Denotes items for which ranking was tied with another item in the list.
### Student Survey

#### Differences by College (where the mean scores were statistically significant for the top items in importance for students overall)

<table>
<thead>
<tr>
<th>Overall Importance Score (Rank)*</th>
<th>CBUS students rated career planning and job placement even higher than students from other colleges.</th>
<th>4.5 (2*)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAG and CLA students rated helpful and accurate advising as particularly important.</td>
<td>4.4 (5*)</td>
</tr>
<tr>
<td></td>
<td>CAED and CLA students placed the highest importance on library resources.</td>
<td>4.4 (5*)</td>
</tr>
<tr>
<td></td>
<td>CLA students rated library hours as more important, and CSM students rated library hours as less important, than students from other colleges.</td>
<td>4.3 (7*)</td>
</tr>
<tr>
<td></td>
<td>CAED students placed the most emphasis on the availability of General Education sections to meet their scheduling needs.</td>
<td>4.2 (9*)</td>
</tr>
</tbody>
</table>

#### Differences by College (where the mean scores were statistically significant for the educational services with the greatest gap between importance and satisfaction to students overall)

<table>
<thead>
<tr>
<th>Overall Satisfaction Score (Rank for Gap between Satisfaction and Importance)</th>
<th>CBUS students are most satisfied, and CAG and CSM students least satisfied, with the availability of summer classes in their major.</th>
<th>2.1 (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAG students are most satisfied, and CENG students least satisfied, with the availability of classes in their major.</td>
<td>3.3 (3)</td>
</tr>
<tr>
<td></td>
<td>CSM students are least satisfied with the availability of summer General Education classes.</td>
<td>2.7 (5*)</td>
</tr>
<tr>
<td></td>
<td>CLA students are least satisfied with library resources</td>
<td>3.4 (5*)</td>
</tr>
<tr>
<td></td>
<td>CLA students are most satisfied with the effectiveness of their instructors.</td>
<td>3.6 (5*)</td>
</tr>
<tr>
<td></td>
<td>CENG students are most satisfied, and CLA students least satisfied, with career planning and job placement.</td>
<td>3.6 (5*)</td>
</tr>
</tbody>
</table>

* An asterisk denotes items for which ranking was tied with one or more other items in the list.
Selected Additional Questions (not directly related to funding)

Educational Outcomes (from Visionary Pragmatism)

Classes in a student's major contribute most to factual knowledge, to intellectual abilities and to intellectual inspiration. Major classes are also effective in developing behavioral and social skills. Major classes are least effective in addressing attitudes and values.

Elective, support and minor courses contribute most to factual knowledge, to intellectual abilities and to intellectual inspiration as well, but less effectively than classes in a student's major. Support classes contribute least effectively to social skills and to attitudes and values.

Students perceive that General Education classes contribute less than major or support classes to all educational outcomes. General Education classes are relatively more effective in addressing attitudes and values than other outcomes, and least effective in intellectual inspiration.

Co-curricular activities contribute most to the development of social skills and to constructive attitudes and values.

Student and Parent Surveys

| Importance of getting through as quickly as possible (for students) | 4.1 |
| Importance of getting through as quickly as possible (for parents) | 3.96 |

What Will You Do as Fees Increase?

Students' and parents' first response to increased fees was financial -- through increased parental support, employment, loans and/or savings. Parents saw their support as relatively more important, whereas more students turned to employment to pay additional fees.

Taking more units was the fifth choice for both students and parents.

Very few students (or parents) anticipated they would respond by dropping out of school, and they considered these options only with fee increases of $250 or more per quarter. A few students (and parents) also predicted that they might take fewer units.

Advisory Group and Honored Alumni Surveys

Do you think Cal Poly should charge a differential fee? Percent yes

| Advisory group members | 88.0 % |
| Honored alumni | 87.5 % |

How do you view a public policy that asks students to pay a larger share of the cost of their education?

| Advisory group members | 3.85 |
| Honored alumni | 4.31 |
**Faculty Survey**

**Differences by College** on the four items with the lowest mean scores:

- **New Computer Equipment**: chi square test significant at \( p = .0001 \)
  
  CLA faculty were more supportive of maintaining the current level of funding, or only a slight increase; faculty from all other colleges favor a major increase.

- **Library Services**: chi square test significant at \( p < .01 \)
  
  CLA and CSM faculty were more supportive of a major increase in funding; CAG and CAED faculty favored a slight increase; and CBUS and CENG faculty were divided between a major increase or none. Note that CLA students placed similar emphasis on the importance of library services, but that CSM students did not.

Scores for funding to Hire More Faculty and for Summer Classes were not significant by college.

**Faculty and Staff Surveys**

**Grouped Responses from Open-Ended Questions**: \( \geq 8 \% \) of respondents mentioned the following:\(^1\)

<table>
<thead>
<tr>
<th>Definition of Quality in Terms of Students' Education</th>
<th>Faculty</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-solving, critical thinking, life-long learning</td>
<td>26.8 %</td>
<td>12.3 %</td>
</tr>
<tr>
<td>Developing a well-rounded individual, broad education</td>
<td>24.2</td>
<td>21.6</td>
</tr>
<tr>
<td>Experiential learning</td>
<td>16.5</td>
<td>9.9</td>
</tr>
<tr>
<td>Lower student-faculty ratio/small classes</td>
<td>16.0</td>
<td>4.9</td>
</tr>
<tr>
<td>Effective classroom instruction/commitment to teaching</td>
<td>13.9</td>
<td>8.0</td>
</tr>
<tr>
<td>Access to necessary classes/up-to-date equipment</td>
<td>13.4</td>
<td>10.5</td>
</tr>
<tr>
<td>Career preparation</td>
<td>10.0</td>
<td>19.8</td>
</tr>
<tr>
<td>State-of-the-art knowledge, skills</td>
<td>...</td>
<td>9.9</td>
</tr>
<tr>
<td>Timely graduation</td>
<td>...</td>
<td>9.3</td>
</tr>
<tr>
<td>Competency, esp. in communication</td>
<td>...</td>
<td>8.6</td>
</tr>
</tbody>
</table>

**Outcomes/Measures of Quality**

<table>
<thead>
<tr>
<th>Outcomes/Measures of Quality</th>
<th>Faculty</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiring statistics/job placement/pay level</td>
<td>57.7 %</td>
<td>14.8 %</td>
</tr>
<tr>
<td>Well-rounded individual</td>
<td>29.0</td>
<td>...</td>
</tr>
<tr>
<td>Entrance into and/or progress through graduate school</td>
<td>24.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Students' satisfaction with Cal Poly education</td>
<td>19.5</td>
<td>11.3</td>
</tr>
<tr>
<td>Performance on standardized tests, GPA, papers, projects</td>
<td>14.1</td>
<td>7.0</td>
</tr>
<tr>
<td>Employer surveys, satisfaction</td>
<td>...</td>
<td>9.6</td>
</tr>
<tr>
<td>Access to, adequacy of support services</td>
<td>...</td>
<td>9.6</td>
</tr>
<tr>
<td>Alumni surveys</td>
<td>...</td>
<td>8.7</td>
</tr>
<tr>
<td>Graduation rate, retention</td>
<td>6.2</td>
<td>6.1</td>
</tr>
</tbody>
</table>

---

\(^1\) Note: Different individuals coded comments in response to the open-ended questions on the faculty and staff surveys. Thus, some categories do not match. Also, note that some of the same categories appeared both as definitions and measures of quality. Summaries of the faculty and staff focus group discussions provide further information about definitions and measures of quality.
## Appendix B. Cal Poly Plan Purposes and Estimated Costs of Potential Investments

<table>
<thead>
<tr>
<th>INVESTMENT CATEGORIES</th>
<th>STATE SUPPORT</th>
<th>CAMPUS-BASED FEE SUPPORT to meet CAL POLY PLAN PURPOSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Ranked Areas from Surveys</td>
<td>Potential Investments</td>
<td>Enrollment Growth</td>
</tr>
<tr>
<td><strong>FINANCIAL AID</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate grant program (@ 20-30% of fee increase)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate student incentive program</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INSTRUCTIONAL PROGRAMS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major classes</td>
<td></td>
<td>Positions depend on enrollment increment</td>
</tr>
<tr>
<td>GEB classes</td>
<td></td>
<td>Positions depend on enrollment increment</td>
</tr>
<tr>
<td>Summer classes (major and GEB)</td>
<td></td>
<td>Positions depend on level of increase for summer</td>
</tr>
<tr>
<td>Instructional Effectiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum and course development</td>
<td></td>
<td>Curriculum changes facilitate student progress</td>
</tr>
<tr>
<td>&quot;Learn by Doing&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student teaching and grading assistants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technicians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center for Experiential Learning</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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<td>Top Ranked Areas from Surveys</td>
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<td>Enrollment Growth</td>
</tr>
<tr>
<td><strong>INSTRUCTIONAL SUPPORT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Resources and Access</td>
<td>Saturday and evening hours</td>
<td>Extending hours contributes to student progress</td>
</tr>
<tr>
<td></td>
<td>Acquisition of materials for polytechnic curriculum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>On-line data bases and services</td>
<td></td>
</tr>
<tr>
<td><strong>FACULTY AND STAFF</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Development</td>
<td>Faculty leave replacement, research assistants, professional travel</td>
<td>Faculty professional development enhances instruction</td>
</tr>
<tr>
<td></td>
<td>[No explicit staff professional development proposals in November submittals.]</td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>Tenure-track positions</td>
<td>Tenure-track positions reinforce ability of programs to meet needs of majors</td>
</tr>
<tr>
<td>Staff Support</td>
<td>[November submittals assume appropriate staff support.]</td>
<td>Adequate support services necessary for new enrollment</td>
</tr>
<tr>
<td><strong>STUDENT PROGRAMS AND SERVICES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Planning and Placement</td>
<td>Expansion of career planning, counseling, aptitude testing and interpretation; employer relations</td>
<td></td>
</tr>
</tbody>
</table>

LCD, December 30, 1995 (Purposes & Investment Costs), Page B-2
## Appendix B. Cal Poly Plan Purposes and Estimated Costs of Potential Investments

<table>
<thead>
<tr>
<th>INVESTMENT CATEGORIES</th>
<th>STATE SUPPORT</th>
<th>CAMPUS-BASED FEE SUPPORT to meet CAL POLY PLAN PURPOSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Ranked Areas from Surveys</td>
<td>Potential Investments</td>
<td>Enrollment Growth</td>
</tr>
<tr>
<td>Academic Advising</td>
<td>Automated degree audit for student and adviser access</td>
<td>[No other explicit proposals in November submittals.]</td>
</tr>
<tr>
<td>TECHNOLOGY AND EQUIPMENT</td>
<td>Instructional Equipment (inc. maintenance)</td>
<td>Laboratory and classroom teaching equipment</td>
</tr>
<tr>
<td>Computer Technology/Equipment</td>
<td>Electronic studio classrooms; technology-enabled classrooms</td>
<td>Increased access to laboratories facilitates student progress</td>
</tr>
<tr>
<td></td>
<td>Student workstations and software</td>
<td>Increased access to laboratories facilitates student progress</td>
</tr>
<tr>
<td>FACILITIES AND CAMPUS ENVIRONMENT</td>
<td>Teaching Facilities (labs/classrooms)</td>
<td>[Subsumed within technology and equipment proposals, above.]</td>
</tr>
</tbody>
</table>

*NOTE: Cost estimates based on preliminary analysis by colleges and divisions in November 1995.*
ACADEMIC SENATE RESOLUTION ON GUIDELINES FOR EXPERIENTIAL EDUCATION

January 23, 1996

Because Curriculum Committee's resolution seems to reaffirm that valuable and educationally sound learning does occur through experiential education, it is likely that the real problem to be addressed is one of measurement; that is, how can learning from this form of education be measured in an academically sound and standardized manner?

Difficulty in measuring experiential learning is not a problem unique to Cal Poly. A brief bit of research through materials from the National Society of Experiential Education indicates that when experiential courses are tightly structured, student learning can equal and even surpass learning taught in the classroom. Tools for adding structure include assignment of related readings, class lectures/discussions on a weekly basis, reflection papers which ask the student to tie their experiences into the assigned readings and or class lectures/discussions, essay exams, portfolios, etc.

For example: The Vanderbilt Political Science department compared interns working at the state legislature with students taking legislative processes classes at three different campuses. Faculty found that students in the internships had a better grasp of the real political processes than those in the classes because they were exposed to informal power structures, how groups really work, etc. The interns’ answers on an essay exam were much more sophisticated. When one moves away from a grading system that relies heavily on memorizing information toward a grading approach that also measures learning outcomes such as critical thinking and the ability to use observation as a tool for learning, experiential learning can be superior. And in a study at the University of Michigan students in courses with community involvement components not only received higher grades than the control groups but reported themselves as being much more motivated to learn course material.

My concern with the resolution before us is two-fold:

- What is meant by "significant component of out-of-classroom experience"? Are courses where students meet weekly, have assigned readings, etc. included or is the intent to address only those courses where more than a certain percentage of the students’ time is spent in situations not directly supervised by faculty?

- This resolution closes the door to any faculty member who wishes to award letter grades. If a faculty member can demonstrate to his or her peers that he or she can measure learning, there ought to be a way for that faculty member to award letter grades.

Therefore I would like to propose the following amendments:

WHEREAS: Experiential education constitutes a valued part of Cal Poly's curriculum; and

WHEREAS, Experiential education includes those courses in which students spend more than 90% of class time in the field. For purposes of this resolution, such courses include coops, internships, practicum, enterprise projects, independent study, service involvement, and club-related activities;

WHEREAS, Such courses may call for student design and implementation of course methods and goals; and

WHEREAS, While it may be that such courses typically represent highly individualized educational experiences for students and raise difficulties in ensuring standardized expectations across the university, it is possible to measure learning which occurs through experiential activities and resources are available to assist faculty in designing this measurement;

RESOLVED: General university policy on experiential education courses be that they are graded on a C/NC basis but that faculty members who wish to award letter grades may petition the Academic Senate Instruction Committee for approval to do so.

Presented by Sam Lutrin, Academic Senator