

## CALIFORNIA POLYTECHNIC STATE UNIVERSITY San Luis Obispo, California 93407 ACADEMIC SENATE 805:756.1258

# MEETING OF THE ACADEMIC SENATE Tuesday, February 10, 2004 UU220, 3:10 to 5:00pm

- I. Minutes: Approval of the January 20, 2004 Academic Senate meeting minutes (pp. 2-3).
- II. Communication(s) and Announcement(s):
- III. Reports:
  - A. Academic Senate Chair:
  - B. President's Office:
  - C. Provost's Office:
  - D. Statewide Senators:
  - E. CFA Campus President:
  - F. ASI Representatives:
  - G. Other: Academic Affairs Office: eMS update & financial report; PolyProgress
- IV. Consent Agenda:
- V. Business Item(s):
  - A. Resolution on Free Electives: Hannings, Chair of the Curriculum Committee, first reading continued (pp. 4-5).
  - B. Resolution on *Appointment Procedures for Grant-related Instructional Faculty (GRIF) ofExceptional Merit:* Foroohar, Chair of the Faculty Affairs Committee, second reading (pp. 6-8).
  - C. Resolution on Proposal for the Establishment of the University Center for Excellence in Science and Mathematics Education: Bailey/Detweiler/KonopakJOpava, second reading (pp. 9-15).
- VI. Discussion Item(s):
- VII. Adjournment:

# CALIFORNIA POLYTECHNIC STATE UNIVERSITY San Luis Obispo, California 93407 ACADEMIC SENATE 805.756.1258

#### MINUTES OF

### The Academic Senate Tuesday, January 20, 2004 UU220, 3:00 to 5:00 pm

- I. Minutes: The minutes of November 18 and December 2,2003 were approved without change.
- II. Communications and Announcements: None.
- III. Reports:
  - A. Academic Senate Chair: (Lewis) Social Hour co-sponsored by the College of Liberal Arts will be held Thursday, January 29, 4-6 pm at Vista Grande Restaurant. Handouts: President Baker's response to the Resolution on LEED certification for Student Housing North and page 17 to be added to current agenda.
  - B. President's Office: (Howard-Greene) The Governor's budget plan for the state includes further reductions, nearly 1/4 billion or 9% of total system budget, with some of the cuts being earmarked. For Cal Poly this translates to approximately 8+% reduction on top of the 10.5% reduction that has already been absorbed over the last year. The budget plan also provides for a reduction in enrollment of 20,000 students systemwide and as many of 800 for Cal Poly. CSU is requesting additional flexibility in allocating any further cuts in order to protect valuable programs from being eliminated. One indirect implication of the budget is the slow-down of some plans for growth, in particular Student Housing North, where the first phase will probably not be ready until Fall of 2007 or 2008. Proposition 57, which would provide \$15 billion in a long line of credit to cover some funding commitments and Proposition 55, a \$12 billion bond to benefit all segments of education will bring over \$34 million to our campus, are critical for Cal Poly.
  - C. Provost's Office: (Detweiler) a list of 12 institutional priorities that have been identified as items to be addressed during the next year or so was presented with updates planned for future meetings. Tom Jones, College of Architecture and Environmental Design Dean, mentioned that the administration has approached faculty members to assist the university with green building elements of Student Housing North and help guide towards getting more achievements by adopting the following principles: first, identify legitimate outside third party professionals, second, form a team of people with specializations and expertise, third, to allow the teams to come together and provide Cal Poly with realistic choices that can be adopted.
  - D. Statewide Senators: None.
  - E. CFA Campus President: (Foroohar) a tentative agreement has been reached which CFA, the Chancellor's office, and the Board of Trustees. One of the main issues discussed was the Golden Handshake program, which will provide two years of service to all eligible faculty who wants to apply. The only limitation is the number of applications per department. For those who want to retire before spring quarter, their name must not appear on the spring quarter schedule at the time of application, and they can't FERP but can return as lecturers. The number of faculty searches systemwide for tenure track faculty is equal to the number of separations plus 65 rolled over from the previous year but there are no guarantees for the 2004-2005 academic year unless the budget reaches \$2.468 billion in general funds. Parking will be pretax and no increases are expected

until January 2005. Salary and working conditions for state funded summer quarter should be equal to regular quarters. Next year's negotiations will start in April 2004, and with the worsening of budget and a new Governor, a lot of pressure is put on the pre-openers.

- F. ASI Representatives: None.
- G. Other: Robert Gregg, Outreach Coordinator for Capital Fellowship Programs, Center for California Studies at Cal State Sacramento. Every year there are 64 placements in all three branches of California state government including the senate assembly, the executive branch, and throughout the Iudicial branch. These are positions of significant responsibility in state government, which often lead to full-time positions in public service. The state of California has been sponsoring these positions since 1957 in one form or another. Professors are the greatest allies in recruiting qualified applicants please pass the information to departments and student. For more information about specific lobs for each program, please visit the fellowship page at: <a href="http://www.csus.edulcalstIPrograms/programs.html">http://www.csus.edulcalstIPrograms/programs.html</a>
- *IV.* Consent Agenda: None.
- V. Business Item(s):
  - A. Resolution on Appointment Procedures for Grant-related Instructional Faculty (GRIF) of Exceptional Merit: Foroohar, chair of the Faculty Affairs Committee. This resolution asks that the Academic Senate of Cal Poly approve the Appointment Procedures for Grant-related Instructional Faculty of Exceptional Merit and forward it to President Baker for his approval. □ ill return as second reading item at the next Academic Senate meeting.
  - B. Resolution on Proposal for the Establishment of the University Center for Excellence in Science and Mathematics Education: Detweiler, Provost. This center will recruit and train secondary level teachers in the areas of Science and Mathematics. This resolution requests the approval of the proposal for the establishment of the University Center for Excellence in Science and Mathematics Education. □ ill return as second reading item at the next Academic Senate meeting.
  - C. Resolution on Free Electives: Hannings, chair of the Curriculum Committee. The Curriculum Committee unanimously supports this resolution which allows programs to require fewer than 9 units of free electives in order to bring down the number of units required to complete a degree and requests that programs allow their students flexibility in meeting all degree requirements. □ ill continue as fIrst reading item at the next Academic Senate meeting.
- VI. Discussion Item(s): None.
- VII. Meeting ad ourned at 4:45 pm.

Submitted b 72 advs regory

Academic Senate

# Adopted:

# ACADEMIC SENATE of CALIFORNIA POL TECHNIC STATE UNIVERSIT San Luis Obispo, CA

#### AS- -041

# RESOLUTION ON FREE ELECTIVES

1	$\Box$ HEREAS,	Current campus policy per Academic Senate Resolution AS-234-87/CC and CAM
2		section 411.1 require each program at Cal Poly to include 9 units of free electives,
3		or supply lustification why they cannot as part of their curriculum proposals each
4		cycle and
5		
6	$\Box$ HEREAS,	The CSU Board of Trustees have reduced the minimum number of units for a
7		Bachelor's degree to 180 quarter units with the expectation that programs will
8		assume that level unless there is significant instification for a higher number of
9		units□and
10		
11	$\Box$ HEREAS,	Current CSU policy favors graduating students in a timely manner, which means
12		within four years for a four-year degree □and
13		
14	$\Box$ HEREAS,	Previous Academic Senate resolutions have encouraged departments to make their
15		curricula more flexible therefore, be it
16		
17	<b>RESOLVED</b> :	That programs may reduce their required free electives below the currently
18		required 9 units if the units are used to reduce the total number of units required
19		for the <u>degree and be it further</u>
20		
21	RESOLVED:	That programs allow their students as much flexibility as possible in meeting
22		malor, support, and General Education requirements.

Proposed by: Academic Senate Curriculum Committee Date: November 18, 2003 Revised: January 6,2004 <u>Revised: January 21, 2004</u>

# To: Academic Senate From: Harvey Greenwald

## **Amendment to Resolution on Free Electives**

The following resolved clause is to replace the first resolved clause in the resolution.

Resolved: That programs proposing to reduce the number of required free electives below 8 units be required to provide Estification.

Adopted:

# ACADEMIC SENATE of CALIFORNIA POL TECHNIC STATE UNIVERSIT San Luis Obispo, CA

#### AS- -04□

# RESOLUTION ON APPOINTMENTPROCEDURES FOR GRANT-RELATED INSTRUCTIONAL FACULTY(GRIF) OF EXCEPTIONAL MERIT

1	Background: Grant-related instructional faculty (GRIP) is a classification for faculty receiving		
2	compensation from grants that permits such compensation to be processed through the University		
3	so that it becomes part of one's base pay (up to 25% of normal pay).		
4			
5	$\Box$ hen the GRIP classification was established in 1975, campuses were asked to establish		
6	procedures for selection of appointees. $\Box$ hile many campuses established such procedures, Cal		
7 8	Poly did not. As a result, selection of GRIP appointees has been ad hoc. The following resolution proposed by the Academic Senate Faculty Affairs Committee remedies the omission		
9	proposed by th	the readenite Senate Fueldy Athan's Committee femedies the omission.	
10	$\Box$ HEREAS,	Grant-related Instructional Faculty (GRIP) is a classification for faculty whose	
11		work involves grants and grantor institutions and	
12			
13	$\Box$ HEREAS,	Cal Poly has faculty classified as GRIP, but there is no set criteria or procedures	
14		for nomination and appointmenteollege deans currently administer the process	
13		and	
10		Since the work of feaulty is in the framework of academic programs, the process	
1/	$\Box$ HEKEAS,	should be regulated through shared governance (i.e. the Academic Senate) with	
10		the exception of contractual provisions (i.e., salary and benefits) that take	
20		precedence over local policy therefore be it	
20		precedence over local policy intererore, be it	
22	RESOLVED	That the attached Appointment Procedures for Grant-related Instructional	
23		<i>Faculty of Exceptional Merit</i> be approved by the Academic Senate of Cal Poly	
24		and forwarded to the President for his approval.	
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Proposed by: Academic Senate Faculty Affairs Committee Date: November 20, 2003 Revised: January 6, 2004

# APPOINTMENT PROCEDURES FOR GRANT-RELATED INSTRUCTIONAL FACULTY OF EXCEPTIONAL MERIT

# I. Definition.

As a result of action taken by the CSU Board of Trustees, instructional faculty members meeting specified criteria may be appointed to two classifications (IO-month and 12-month) $\Box$  each provides for compensation from grants, individual gifts or bequests, or foundation allocations at a 5 35% differential at a rate specified by the Collective Bargaining Agreement (currently 5-35%) above the salary for their regular rank and step.

Each appointment to one or the other classification is to be made, as appropriate, for one academic year or 12-month period only, subject to additional appointments by the President after faculty consultation positive recommendation and within the limits of the grant support. Appointment to either classification does not constitute a promotion, nor does termination of an appointment without renewal constitute a demotion.

# **II.** Minimum Qualifications.

- 1. In addition to the education and experience normally required for the academic rank to which they are to be appointed, the candidates must have exceptional professional merit in scholarship and teaching as evidenced by regional or national recognition.
- 2. The faculty member must be involved in the instructional program through classroom faboratory teaching and for mentoring students in training, research or creative activities.
- 3. The faculty member's grant and contract activity must clearly contribute to the regular responsibilities of the university.

# **III.** Appointment Procedures.

Appointment procedures for these classifications shall be developed as follows:

- Particular qualifications for positions shall be identified either by the fund grantor, sub lect to the approval of the appropriate department, college, or university committees and administrators □or, by consultation among the appropriate committees and administrators. <u>Normally, d Department</u> recruitment committees, department chairs, and college deans <u>should shall</u> be consulted, with final approval from the Academic Vice President and the President.
- Procedures for selection of recipients of particular grants shall be developed by a similar process of consultation. Procedures will necessarily vary because of differences in the nature and terms of funding arrangements, but should include specific provisions relating to recruitment of candidates (whether by national search nomination by grantor, university faculty, university administrators, etc.) and the final selection.
  <u>nenever possible, n</u> Normal university procedures for the recruitment and

selection of faculty <u>should shall</u> be used. No appointment may be made without the recommendation of the appropriate faculty committee(s) and administrator(s) in the unit to which the appointment is made, and without the approval of the Vice President of Academic Affairs and the President. The recommendations <u>should shall</u> address whether the GRIP applicant is a distinguished faculty member who also meets criteria  $\Box$ I.2 and II.3.

3. Faculty members who have been awarded a sabbatical or difference-in-pay leave are not eligible for a GRIP appointment for the duration of the sabbatical or difference-in-pay.

# **IV.** Remuneration.

- 1. Appointees to these classifications will receive compensation comprising the base salary pertaining to their normal faculty appointment plus a  $\frac{5\%}{100}$  to  $\frac{35\%}{100}$  differential at a rate specified by the Collective Bargaining Agreement (currently 5-35%) above such base salary. Minimally, the differential portion, including related employee benefits, of the total compensation to each appointee of these positions will be reimbursed from funds furnished to the campus for that purpose by the grant, from individual bequests, and by foundation allocation.
- 2. The letter of appointment shall state the amount of the differential.
- 3. □ hen the appointment to a grant-related instructional position is concluded, the individual shall revert **back** to the salary classification of his ther prior faculty position, if any, as determined by the amount of the differential stated in the letter of appointment.

Pertinent provisions of the collective bargaining agreements (current or future) supersede this policy.

# ACADEMIC SENATE of CALIFORNIA POLYTECHNIC STATE UNIVERSITY San Luis Obispo, CA

#### AS- -04/

# RESOLUTION ON PROPOSAL FOR THE ESTABLISHMENT OF THE UNIVERSITY CENTER FOR EXCELLENCE IN SCIENCE AND MATHEMATICS EDUCATION

1 **Background:** Cal Poly is unique among universities in the long established relationships among teacher 2 education, the academic disciplines, and 12 education. First, over a decade ago, the university chose to 3 support education as an autonomous unit by creating the University Center for Teacher Education. The 4 center <u>name</u> and eoneept were important in that professional education faculty and educators in academic 5 departments eame together as VCTE faculty to plan and deliver instructional programs, create policies and 6 procedures for the unit, and participate in leadership, personnel, and budgetary matters. In particular, 7 programs with a mathematics and or science focus include the blended multiple sublect fiberal studies 8 program and single subject programs in mathematics, kinesiology, life science (biology), and physical 9 seienee (chemistry, physics). 10 Second, in addition to VCTE programs, the eampus has long supported a wide range activities involving 11 12 □ 12. These have been sponsored by Academic Affairs and Student Affairs and have focused on 13 preparing preservice teachers, providing professional development for inservice teachers, and motivating, 14 mentoring, and tutoring 12 students. In terms of mathematics and science, examples of these activities 15 inelude: <u>16.</u> CSM proleets: California Science, Math, and Physical Education Subject Matter Proleets 17 (professional development) 18.VCTE special profect initiatives: PAD (middle school reading and math tutoring), CAP (high 19 school reading and math professional development), TRP (teacher reeruitment in math, science, 20 and other areas), EAAPP (high school reading and math professional development), SMART 21 (CSMIUCTE sponsored activities for middle school students). <u>22.</u> VCTE and CSM program initiatives; Teachers in Residence (elementary mathfseience, physics 23 education) <u>24.</u> Cal Poly and 12 eollaboratives: offering Teaching with Teelmology Institute, alignment of 25 technology standards for preservice and inservice teachers, VCTE representative on SLOCOE 26 Education COUfleil <u>27.</u> Cal Poly and Community College eollaboratives: grant with Haneoek College to train tutors, align 28 technology requirements, and provide early field experience articulation <u>29.</u> Cal Poly eoordinating meeting (at request of Provost  $\Box$ ingg): representatives with  $\Box$  12 activities 30 from CAGR, CAED, CENG, CLA, CSM, VCTE, Continuing Education, Provost's Onice (honors 31 program, university writing lab) 32. Thus, the proposal to establish a University Center for Excellence in Science and Mathematics 33 Education emerges from the long term relationships among UCTE, the academic departments, and 34  $\Box$  12, the wide range of  $\Box$  12 initiatives offered across campus, and the President's new emphasis 35 on professional education. 36

36 <u>RESOLVED:</u> That the attached <u>Proposal</u> t8 <u>EstRblish the</u> <u>University</u> <u>Centel'f81' Excellence in</u> 37 Science and Mathematics EducRti8n be approved by the Academic Senate of Cal Poly and 38 forwarded to the President for his approval. 39 40  $\square$  HEREAS, California's continued economic vitality depends upon its ability to develop and apply 41 scientific and technological innovations and 42 43  $\square$  HEREAS, Rates of high school and college program completion in California, particularly in science, 44 technology, engineering, and mathematics (STEM) disciplines, lag behind those of many 45 other states and 46 47  $\Box$  HEREAS, Early exposure to and success in science and mathematics is key to successful 48 participation in STEM disciplines and careers and 49 50 Competent, inspired  $\Box$ -12 science and mathematics teaching is perhaps the single most  $\square$  HEREAS, important variable influencing student participation and success in STEM disciplines, but 51 52 a significant percentage of California's -12 science and mathematics teachers are not well 53 qualified□and 54 55 The CCST (California Council on Science and Technology) Critical Path Analysis, and  $\square$  HEREAS, national initiatives, such as the Business Higher Education Forum, are advocating greater 56 57 attention to -12 students' early preparation in science and mathematics and 58 59  $\Box$  HEREAS, Cal Poly has long-established relationships and commitments to preparing new teachers, 60 providing professional development to in-service teachers, and working with  $\Box$ -12 students in the science and mathematics disciplines Therefore, be it 61 62 63 That the Academic Senate endorse the Proposal to Establish the University Center for .<u>RESOLVED:</u> 64 Excellence in Science and Mathematics Education.

> Proposed by: Philip Bailey, Robert Detweiler, <u>Bonnie</u> □onopak, and Susan Opava Date: November 14,2003 Revised: January 12, 2004 <u>Revised: January 30,2004</u>

# <u>Proposal to establish the University Center for Excellence in Science and</u> <u>Mathematics Education</u>

### Background and purpose:

California and the nation have a critical need for an effective educational system that produces the scientists and engineers that are essential to our economy.

- □ California's continued economic vitality depends upon its ability to develop and apply scientific and technological innovations.
- □ Among the state's new, increasingly diverse generation of students, however, rates of high school and college program completion, particularly in science, technology, engineering, and mathematics (STEM) disciplines, lag behind many other states. (See, for example, the California Council for Science and Technology's 2002 □Critical Path Analysis of California's Science and Technology Education System.□)
- □ Early exposure to and success in science and mathematics is key to successful participation in STEM disciplines and careers.
- □ Competent, inspired □-12 science and mathematics teaching is perhaps the single most important variable influencing student participation and success in STEM disciplines, but a significant percentage of California □-12 science and mathematics teachers are not well qualified.

Cal Poly, through the strength of its academic programs, makes an important contribution as one of the nation's leading educators of high-quality polytechnic graduates. Cal Poly also recognizes the need to strengthen the quality of science and mathematics education in California's  $\Box$ -12 schools in order to help ensure that California students are prepared to pursue further study leading to careers in science and technology fields. Through its support for the CCST Critical Path Analysis and initiatives at the national level, including an emerging Business Higher Education Forum  $\Box$ -12 science and mathematics initiative, Cal Poly has advocated greater attention to the early preparation in science and mathematics of the nation's diverse student population. Cal Poly's Centennial Celebration, the Inaugural Baker Forum and the ongoing deliberations of the President's Cabinet all have given a place of prominence to this issue.

At the April 2003 Plenary Session of the Cal Poly President's Cabinet, the Cabinet urged Cal Poly to strengthen and expand its direct efforts to support  $\Box$ -12 science and mathematics education and in particular its efforts to prepare and support  $\Box$ -12 science and mathematics  $\Box$  teachers. On behalf of the University, President Baker accepted that challenge. The University Center for Excellence in Science and Mathematics Education is dedicated to that purpose.

#### Mission:

The Center's mission is to build upon and strengthen cooperative relationships with  $\Box$ -12 schools and private industry in order to pursue three important purposes:

1. promote and support high quality teaching of science and mathematics in  $\Box$ -12 schools  $\Box$ 

- 2. produce more well-qualified  $\Box$ -12 teachers with special strengths in science and mathematics education  $\Box$  and
- 3. encourage □-12 school students to study science and math so they can enter □pathways □leading to careers in science, technology, engineering, and mathematics.

# Goals:

The specific goals of the Center include the following:

- □ Promote and support Cal Poly's □-12 science and mathematics teacher education programs.
- □ Support □-12 science and mathematics teachers so they are able to remain professionally current, to be more effective with their students, and to be retained in the teaching profession.
- □ Encourage private industry to support □-12 science and mathematics teachers, students, and programs.
- □ Encourage □-12 students to study science, technology, engineering and mathematics (STEM) disciplines and pursue careers in STEM fields.
- □ Serve as a repository of information on □best practices □in □-12 science and mathematics education.
- □ Assess the quality of science and mathematics educational programs.
- □ Influence public policy regarding excellence in science and mathematics education.

# Proposed short-term-objectives:

- (1) Expand Cal Poly's □-12 science and mathematics teacher education program in order to increase the number of graduates per year to 50.
- (2) Support the outreach efforts of the admissions staff and expand Targeted recruitment in order to ensure the quality and diversity of students in Cal Poly's 12 science and mathematics teacher education programs (elementary and secondary levels).
  - □ Expand on <u>targeted</u> recruitment in the Liberal Studies program.
  - □ Identify specific ways to recruit good students for the single sub lect (secondary school) credential program in science and mathematics.
- (3) Collect information on Dest practices D in science and mathematics education from existing programs throughout the nation, and provide assessment and evaluation of Cal Poly programs in these areas.
- (4) Solicit financial support from corporations and individuals to provide scholarships for science and mathematics education students at Cal Poly with an initial goal of scholarship support for 10 students.
- (5) Seek grants and corporate support to help fund the following needs of the Center:
  - $\hfill\square$  Support for the operation of the Center.
  - □ Support for building stronger relationships with □partner □schools.
  - □ Scholarships for □partner□school graduates who go into science and mathematics education programs at Cal Poly.
  - □ Support for science and mathematics teachers in selected schools who would like to help recruit □-12 students into the science and mathematics □pathway.□

- □ A part-time grant writer to assist with specific grant applications
- (6) Establish a Cal Poly website to aid and support □-12 science and mathematics teachers through dissemination of information on curricular innovations, pedagogy, learning assessment, etc.
- (7) Form an advisory group of □-12 science and mathematics teachers to help guide the work of Cal Poly and the Center.
- (8) Host □-12 science and mathematics teachers annually at Cal Poly to review their needs, to consider ways to strengthen STEM pathways, and to identify ways to improve teacher retention.
- (9) Form a corporate advisory group to provide advice and to assist with targeted fund raising that will help accomplish the goals of the University and Center.

#### Proposed longer-term objectives:

- (1) Provide a summer institute to enhance the competency and teaching skills of □-12 science and mathematics teachers.
- (2) Provide on-line instruction to support  $\Box$ -12 science and mathematics teachers.
- (3) Provide professional development and support for science and mathematics teachers at partner schools
- (4) Provide corporate internships or summer employment for □-12 science and mathematics teachers to encourage and support their interest in remaining in the teaching profession.
- (5) Establish a school-within-a school in a selected □-12 district or districts to direct elementary and secondary school students into careers as science and mathematics teachers (future teacher academy concept).
- (6) Organize Cal Poly administrators, faculty, and students to work with □-12 representatives and corporate leaders to influence public policy concerning □-12 science and mathematics teaching and educational □pathways. □
- (7) Expand the teacher-in-residence program.
- (8) Explore ways to recruit targeted retirees into □-12 science math teaching as a □second career.□
- (9) Explore ways to expand □blended □programs for □-12 science and mathematics teacher education students.
- (10) Form a Future Science and Mathematics Teachers Club at one or more targeted 12 schools.
- (11) Provide a mobile wet lab to aid □-6 teachers introduce students to and excite their interest in discovery.

#### Needfor a new organizational structure:

The Center is intended to work within the present Cal Poly organizational structure (particularly the College of Science and Mathematics, the University Center for Teacher Education, and the College of Liberal Arts) to focus on expanding the University's commitment in the area of  $\Box$ -12 science and mathematics education. It will not alter the current academic structure, but will draw upon and support key faculty and staff within that structure as they seek to achieve the goals outlined above. In brief, the Center will attempt to stimulate and coordinate efforts by faculty

and staff from diverse Cal Poly units, from  $\Box$ -12 schools, and from industry. It will seek resources and provide encouragement to faculty and staff who are committed to enhancing  $\Box$ -12 science and mathematics teaching. The Center is needed to help Cal Poly achieve a substantial expansion of its involvement with  $\Box$ -12 science and mathematics education and promotion of pathways to careers in science and technology for  $\Box$ -12 students.

#### Relationship to the instructional program:

The Center is intended to support and assist Cal Poly instructional programs, particularly the science and mathematics teacher preparation programs and master's degree programs in the College of Science and Mathematics, the Liberal Studies Program in the College of Liberal Arts, and the University Center for Teacher Education. It will draw upon faculty and staff from these Cal Poly instructional programs to serve on the Center Advisory Council, and it will remain in close communication with these programs and support them. The Center will not provide instructional programs independent of existing academic entities, yet its work will help foster a broader awareness of science and technology issues and □iteracy.□

#### Founding members and their expertise:

Provost Paul  $\Box$ ingg has taken the lead in forming the Center. He formed a steering committee to initiate the Center's structure, goals, and ob ectives this group includes Dean Philip Bailey of the College of Science and Mathematics, Dean Bonnie  $\Box$ onopak of the University Center for Teacher Education, Dean Harry Hellenbrand of the College of Liberal Arts, and Dan Howard-Greene and Robert Detweiler from the President's office. The Center will draw upon the expertise of Cal Poly faculty and staffwho work with  $\Box$ -12 science and mathematics education, local  $\Box$ -12 teachers and administrators, and representatives from industry.

#### Effect of the unit on academic departments:

The Center will seek to support faculty and staffwho are committed to  $\Box$ -12 science and mathematics education. It will foster growth of their academic programs, seek grants and contributions to assist their enterprises, and provide a means for communication and cooperation. This unit will serve as an advocate for and aid to Cal Poly faculty and staffwho are working to graduate more  $\Box$ -12 science and mathematics teachers  $\Box$  it will seek to aid  $\Box$ -12 teachers who are currently in the field  $\Box$  and it will support activities that encourage  $\Box$ -12 students to pursue careers in science and technology.

#### Organizational structure of the unit:

The Center will report to the Provost. It will be guided by a Center director and a Board of Directors. Board members and the Board Chair shall be appointed by the University President and shall include:

- □ Provost
- $\hfill\square$  Dean, College of Science and Mathematics
- □ Dean, College of Liberal Arts

- □ Dean, University Center for Teacher Education
- $\Box$  One (1) representative from the Center's corporate advisory group.
- □ Five (5) representatIves from □-12 education, at least three of whom will be science or mathematics teachers
- Two (2) community college faculty, with representatives from Cuesta College and Hancock College
- Five (5) Cal Polyfaculty, with representatives from the College of Liberal Arts, College of Science and Mathematics, and the University Centerfor Teacher Education
- Two (2) Cal Poly science and mathematics education students
- □ One (1) representative from University Advancement
- □ Executive Assistant to the President

The Director of the Center will organize Board **meetings** and support the Board Chair in convening the Board. Board meetings will take place at least once each quarter during the regular academic year, or more often as needed.

Bylaws and more formal operating procedures will be developed by the Center Director and Board.

# Fiscal and administrative support and facilities:

The Center will not be allocated statefunding for its operations. Rather it will draw on existing Cal Poly staffand volunteer Advisory Board members for support and seek outside funding for its activities.

Dr. Philip Bailey, Dean of the College of Science and Mathematics, and Dr. Bonnie □onopak, Dean of the University Center for Teacher Education, are serving as the Center's founding codirectors and will meet the Center's initial day-to-day administrative support requirements through the existing resources of their respective offices.

The Center will seek grants and donations to help faculty and staffachieve Cal Poly's goals of enhancing  $\Box$ -12 science and mathematics education, particularly those involving  $\Box$ -12 teachers and students directly.

The Center itself will require minimal funds to operate, inasmuch as it draws upon existing staff and resources. On the other hand, it will cost a substantial amount to expand Cal Poly's teacher education programs, to support  $\Box$ -12 teachers, and to encourage  $\Box$ -12 students to study science and technology. The rate of achieving these ob lectives will depend on expansion of State support, winning grants and donations, and engaging corporate and other partners.

The Center is not dependent on outside sources of funding for its modest initial operation. If it uses grants or donations to expand operations, however, and later those sources are no longer available then the Center must be pared back. The purpose of the Center is to aid existing academic programs to expand their work in  $\Box$ -12 science and mathematics education $\Box$ it will not drain resources from academic units or programs.