RESOLVED: That a Graphic Communication Institute be established at Cal Poly as proposed in the attached Graphic Communication Institute Proposal.
Graphic Communication Institute

A Proposal Submitted to the Cal Poly Research and Graduate Programs Department

by the

Cal Poly Graphic Communication Department Advisory Board

and the

Graphic Communication Department

Presentation to the Cal Poly Academic Senate

Spring Quarter, 1999
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Graphic Communication Institute
A Proposal Submitted to the Cal Poly Research and Graduate Programs Department
by the
Cal Poly Graphic Communication Department Advisory Board
and the Graphic Communication Department
(Updated) April 25, 1999

Title: Establishment of a Graphic Communication Institute to Act as "Resource Center"
for the Graphic Communication Industry in the Western United States

Purpose and Objectives
* Establish a Graphic Communication Institute at Cal Poly as a "Resource Center" for the
  Western United States printing, imaging, publishing, and related industries.
* Attract applied research projects to Cal Poly in the graphic communication discipline.
* Provide student experiential opportunities through research and testing.
* Provide faculty professional development opportunities through research.
* Facilitate and coordinate expertise for the graphic communication industry, whether it is
  for Cal Poly "home-grown," or the western focus for eastern-based companies,
  institutions, and associations.
* Improve laboratory equipment available for instruction and fee-based testing.
* Partner with industry associations and co-sponsor activities with them (this is an
  immediately available source of revenue and credibility).
* Provide continuing education programs for industry professionals.

In today's business climate, many graphic communication companies would make use of
an institute that offered appropriate services, ad hoc project work, and coordinated the
offerings of seminars and workshops on useful industry topics and imperatives. The
prevailing attitude in the graphic communication industry is "do more with less," and the
institute approach offers an attractive method to "buy," what is needed without hiring
additional people for the longer term.

This proposal requests funding to create a testing and training center which shall become
self-supporting through user fees and donations within one year after start-up. Through
this center, the Graphic Communication Department instructional program will be improved
with upgraded laboratory equipment acquired by the testing facility. The California
publishing and printing industry will be provided with service and support through a fee-
based materials-testing facility and training programs. (The Rochester Institute of
Technology has begun offering a testing plan in April, 1997.)
With no such entity existing in California, the state's graphic communication industry would benefit from such a facility for research, testing, product development and evaluation, and continuing education.

Cal Poly is an ideal site for such an institute being centrally located between the dense graphic arts markets in California, and Cal Poly has the reputation of having one of the best educational programs in professional graphic arts for the nation.

Services Provided to Industry

* Partnering with, and co-sponsoring for the following Eastern-based or international associations to bring advantages in the west: Graphic Arts Technical Foundation, National Association of Printers and Lithographers, Newspaper Association of America, Flexographic Technical Association, Gravure Association of America, Research and Engineering Council of the Graphic Arts, and others. The institute would serve as a pipeline for information and materials in the west without duplicating what is already available.

* Qualified industry "experts," and facilitating contracts between them and interested western companies, on request, or as part of an on-going resource list.

* Qualify and certify instructors to "consult," or "teach," on topics important to the industry in the west, i.e., technical project analyses, Total Quality Management, team-based performance coaching, etc.

* Provide expertise from faculty and Cal Poly students for specific project work to be done for various major "target" companies.

* Product testing: systems, hardware (equipment beta tests), materials (paper, ink, fountain solution, any chemical solution used in printing).

* Coordinate and arrange for offerings of seminars and workshops by Cal Poly faculty in various locations around California, or at specific target companies, by request.

* Offer Cal Poly Graphic Communication department facilities for use as a "retreat" for industry (companies or associations) off-site meetings, etc., to promote the university and its students to companies.

* In cooperation with the university, and individual faculty, aid in facilitating the publishing of various papers, books, and other publications of benefit to the industry.

Benefits to University Faculty and Students

The Institute will:

* Foster closer relationship between industry professionals and students for the future.

* Enhance visibility with future employers and contributors.

* Enhance relationships with potential supporters of the Graphic Communication Endowment fund.

* Create a revenue-generating enterprise.
* Provide another opportunity to "sell," the Graphic Communication Department to major companies in the industry for recruitment and endowments.

* Provide opportunities for students to achieve internships or co-op positions with major companies before graduation.

* Serve as a forum to introduce and emphasize the opportunities at Cal Poly to high schools, junior colleges, and to the international marketplace by its publicity.

* Provide continuing education for faculty.

**Benefits to Companies in the Western Graphic Communication Industry**

The Institute will:

* Provide companies with access to a pool of qualified graduates with industry "real world," experience.

* Provide a source for necessary project work, training, and focused seminars that are local, accessible, and given by those with expertise in the graphic communication business.

* Provide a source for "experts," or experience from across the US, as the institute would facilitate information and contact with other associations.

* Facilitate contact between similar companies, or groups of companies, working on similar projects from other parts of the country (benchmarking).

* Preview potential employees from the institute's student assistants.

* Advise on management and technical issues from faculty and consulting experts.

* Provide continuing education programs.

* Be a common ground to bring together companies to participate in joint ventures.

The institute's primary market would be the west coast corridor of the industry, i.e., San Francisco to Los Angeles; its secondary market would be the states located west of the Rocky Mountains; and its third market would be the remainder of the nation and the Pacific Rim. With its focus on the west, the institute will pursue access to facilities for seminars, workshops, conferences, and special industry meetings in the Los Angeles and San Francisco Bay areas. There have already been preliminary discussions concerning the use of facilities at the Printing Industries Association of Southern California and at the Printing Industries of Northern California. However, headquarters and all testing, research, product evaluations, and related services will take place at the institute's Cal Poly headquarters. All advertising, publicity, and marketing will be generated at Cal Poly, with design and production produced by the Graphic Communication Department as a "showcase" for student talent.

(* A question was raised about any requirement that the institute office be physically located on the Cal Poly campus, or if a home office or other site would be equally acceptable. It has been determined that each option can work.)
Funding Requirements and Business Plan

Graphic Communication Advisory Board: $50,000 in matching funds through industry donations.

Cal Poly Support: $50,000 for first year start-up.

Plan for First Year of Activities

1. Obtain $50,000 in "Seed Money," and get agreement from Cal Poly for "matching funds." We recommend a "top-down," approach between representatives of some of the largest graphic communication companies in the west, and their major suppliers. If each of the ten companies made contact with three suppliers, in various parts of the "vertically integrated," business chain, and asked for a "less-than-capital" amount of $2,000, the target would be reached.

Some Possible Initial Supporters

The "Ten Largest" List
Copley
Freedom Newspapers
Graphic Arts Center
Hearst
RCPC (Brown Printing)
R. R. Donnelley
Treasure Chest
World Color/George Rice
Los Angeles Times
Other Advisory Board companies

Partial Supplier List
AGFA
Imation (Previously 3M)
DuPont
GPI
Flint Ink
Polychrome
Kodak
Scitex
Heidelberg Prepress
Heidelberg Web Press
Goss
BASF
Champion Papers and other paper companies
Smurfit Newsprint
Blanket Suppliers
CREO

2. Three to four seminars or workshops planned in each metropolitan area contracted through Cal Poly Conference Services. Company headquarters will be used as "free" sites. Total income: $10,000 plus 25 percent overhead. Travel, lodging, food, and other incidental expenses will be established as well as per hour charge for instruction.

3. Begin paper testing plan using standard contract procedures administered through Cal Poly’s Grants Development department. Set-up parameters and methods for testing. Average fee is $500 per test series plus 25 percent overhead. An expense schedule will be established as will a per hour charge for laboratory work and report preparation.

4. Identify projects for six of the target companies; identify co-ops and special university "project teams," demonstrate successful completion of projects for industry.

5. Partner with at least two national industry associations to sponsor Western meetings, and/or distribution of information.
6. Through tours and an "open house," showcase the Graphic Communication department's capabilities of faculty, students, and private consultants who may participate in the institute in providing services to industry.

Organization and Administration

The Graphic Communication Institute will report to the dean of the College of Liberal Arts via the Graphic Communication department head. A hired institute administrator will be an industry-respected, perhaps recent retiree, graphic communication professional. The administrator will be responsible for coordinating the institute's programs, projects, and related activities. The administrator's task will be to ensure that the institute will be self-sustaining within one year.

Miscellaneous:

Any income after expenses will go back into the Graphic Communication department educational program.

The institute will not be required to pay overhead expenses from the first year of development money which will be deposited in an "Institute Account."

The Cal Poly Foundation will administer the "Institute Account" and there will be a five (5) percent charge for this service.

All legal matters related to insurance, liability, etc., will be reviewed and approved by the Cal Poly Foundation.
## Projection of Possibilities
**Five Year Operating Budget**

### Graphic Communication Institute

<table>
<thead>
<tr>
<th>REVENUES</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Avg. Gross</th>
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<td>$50,000</td>
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<td>University</td>
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<td>Matching Funds--</td>
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<td>Industry</td>
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<td>Seminars &amp; Speech</td>
<td>$190,000</td>
<td>$290,000</td>
<td>$335,000</td>
<td>$338,000</td>
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<tr>
<td>Testing &amp; Research</td>
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<td>$30,000</td>
<td>$40,000</td>
<td>$50,000</td>
<td>$60,000</td>
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Total Revenues $300,000 $330,000 $375,000 $388,000 $401,000

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<th>EXPENSES</th>
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<tr>
<td>Administrative</td>
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<td>$41,675</td>
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<td>Assistant</td>
<td>$7,200</td>
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<td>$8,335</td>
<td>$8,752</td>
<td>(permanent staff)</td>
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<td>20% Benefits</td>
<td>$25,000</td>
<td>$26,250</td>
<td>$27,563</td>
<td>$28,941</td>
<td>$30,388</td>
<td>5% increase/year</td>
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<td>Director, 0.5 position</td>
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<td>$5,513</td>
<td>$5,788</td>
<td>$6,078</td>
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<td>20% Benefits</td>
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<td>St. dent Assts.</td>
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<td>2% Benefits</td>
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<td>Equipment</td>
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<td>Phone, fax, copying</td>
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<td>Materials &amp; Supplies</td>
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<td>Food Services</td>
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<td>$29,500</td>
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<td>Advertising &amp; mailing</td>
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<td>$62,000</td>
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<td>Administrative Fees</td>
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<td>$16,500</td>
<td>$18,750</td>
<td>$19,400</td>
<td>$20,050</td>
<td>5% of revenues</td>
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<td>GrC Development Fees</td>
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<td>$16,500</td>
<td>$19,000</td>
<td>$19,400</td>
<td>$19,950</td>
<td>5% of revenues</td>
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<td>Misc.</td>
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<tr>
<td>Total Expenses</td>
<td>$296,060</td>
<td>$325,190</td>
<td>$369,203</td>
<td>$380,168</td>
<td>$391,785</td>
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BOTTOM LINE $3,938 $4,810 $6,127 $7,832 $8,815 Revised 4/25/99
Institute Questions and Comments From the Deans' Council and the Academic Senate Executive Committee

1) What will the charges be for facilities, equipment, and space use?

Reply: The equipment, facilities, and space charges will be covered under the 25 percent overhead noted in the proposal. All grants contracts for the university include this overhead charge.

2) Where will the Institute office be and what charges will be assessed for office space and related expenses?

Reply: The Institute's office will be either in the Graphic Communication Department or it will be in the home of the director. If the Institute's office is located in the Graphic Communication Department, the Institute will pay the university a fair rate for space, furnishings, utilities, and other services provided. If the office is located in the director's home, the director will be entitled to all appropriate reimbursements and tax benefits related to home office use. Once determined, costs related to office use and related charges will be built into the budget.

3) The budget item for student assistants seems low. It should probably be tripled if, in fact, students will be integral to the work of the Institute. The ratio of student expenses to teaching/research staff expenses seem a little to wide.

Reply: An adjustment has been made to substantially increase student salaries on a scale that shows progressive increases over the five year projection, and reductions in teaching/research staff expenses are reflected. However, teaching/research staff expenses must still be substantial if the Institute is to draw top talent in the way of researchers, instructors, and recognized experts and scholars in graphic communication.

4) Carefully, proofread any revised proposal. There are some typos and grammatical errors in the present draft.

Reply: Done.

5) Will faculty be diverted from their primary university responsibilities of teaching, office hours, committee work, and other services to the educational mission of the university?
Reply: Absolutely not. While present faculty will have the opportunity to participate at times when they have no other university commitments and responsibilities, the idea of the institute is to draw from the universe of experts throughout the United States and even the world. This is a significant added component that will benefit faculty and students through new thinking and fresh ideas brought to the university.

6) The fees to the university seem low. Check this out.

Reply: A review of this with the dean of Research and Graduate Programs revealed, in fact, that fees to the university are normal and may even be adjusted downward for the first year of operation. The fees include 25 percent overhead to the university and 5 percent to the Cal Poly Foundation for managing the Institute's funds.

7) Will the Institute detract from students getting classes? Will the Institute interfere with the conduct of scheduled classes? Will classes be scheduled around the needs of the Institute? Or, will the Institute be additive to the students' education and possibly expedite progress toward graduation?

Reply: The latter point is the goal: "...the Institute be additive to the students' education and possibly expedite progress toward graduation?"
The proposal is sensitive to there being absolutely no interference with the Graphic Communication Department's regular academic program. All facets of Institute laboratory activities will occur when there is no scheduled use of the lab in need. This means that there will be substantial use of evening, weekend, and academic vacation times. Student participation as research assistants will provide opportunities to earn credits toward Senior Projects, independent study, and GrC 200 and GrC 400 classes. Hence, the Institute will be additive to the educational mission of the department and possibly expedite progress toward graduation.

Additionally, many Institute activities may be conducted off campus or even in other cities by uniquely qualified professionals other than regular faculty members. This applies primarily to conferences, seminars, and related programs.

8) Presently, the proposal includes two budgets; the original one and the revised, more detailed, one. This is confusing. Show only one budget.

Reply: The latest proposal shows only one budget which reflects the changes recommended by the Academic Senate's executive committee.
9) Will funds from the Institute be drawn from State funds meant for the regular academic program, or is there another pool of funds that the start-up money will come from?

Reply: State funds will not be used. There are two start-up funding sources. One is the Graphic Communication Department advisory board that has pledged $50,000 to match $50,000 from the university. The university's contribution comes from a source generated and under the auspices of the dean of Research and Graduate Programs. These funds do not come from State resources provided for academic programs.

10) Will the start-up funds come from student tuition or fees?

Reply: No. The university's share of the start-up funds will in no way come from student tuition and fees. See response to No.9.

11) What is the nature of the testing that might take place? For example, what does paper testing mean?

Reply: For many years, Cal Poly's Graphic Communication Department has been approached by manufacturers and suppliers of graphic art products to do research, testing, product evaluations, and to even serve as a beta site for new software. In fact, the department has done some of this over the years. However, more recently the request for such services has increased dramatically. Examples include anticipated research, testing, and product evaluations of products such as substrates; inks; toners; electrostatic, waterless, and conventional printing plates; offset lithographic printing blankets; lithographic press fountain solutions; rollers; desktop and electronic publishing software; and color proofing materials.

Paper testing refers to evaluating the many chemical and physical properties of paper. Paper is a complex material and is the most expensive disposable commodity used in printing and publishing. The cost of paper itself often represents approximately 50 percent of the cost of printed products. Hence, the control of paper performance on printing presses is highly critical in order to avoid printing problems and waste. Standards of quality and performance have been established many years ago by the Technical Association of the Pulp and Paper Industries (TAPPI). These are known as TAPPI Standards which are measured via prescribed tests for paper coating bond strength, burst strength, tear resistance, fiber strength, grain direction, resistance to changes in atmospheric temperature and relative humidity, dimensional stability, smoothness, and much more. Cal
Poly's Graphic Communication Substrates laboratory is equipped with the apparatus to conduct nearly all of TAPPI Standards tests.

12) How do we anticipate becoming self-sustaining after only one year?

Reply: In part, the budget projection points this out. The Graphic Communication Department advisory board is composed of men and women who are used to developing proactive business plans and following through in meeting missions, goals, and objectives of such plans. The forecast is that once the Institute is announced, the request for services from the western states alone will be sufficient to meet the first year projection.

13) Who is on the Graphic Communication Department advisory board?

Reply: A list of advisory board members has been appended to the proposal.
This will acknowledge receipt of Academic Senate Resolution AS-525-99/GCD, which endorses the establishment of the Graphic Communication Institute, and the preliminary approval of the Institute by the Academic Deans' Council on April 5, 1999.

As a result of the Academic Senate's endorsement and an administrative review of the institute proposal, the Graphic Communication Institute proposal will be brought before the Academic Deans' Council again for final review at its first meeting of the Fall Quarter 1999.