CALIFORNIA COMMUNITY COLLEGES
AND
SAN DIEGO
COMMUNITY COLLEGE DISTRICT

#91-0036
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<th>FISCAL YEAR</th>
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<td>91-0036</td>
<td>San Diego City</td>
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**PROJECT TITLE**

Academic Computing Everywhere (ACE)

<table>
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<th>FUNDING CATEGORY &amp; AWARD</th>
<th>ELIGIBLE PROGRAM</th>
<th>PROJECT CATEGORY</th>
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<td>Loan = $20,000</td>
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<tr>
<th>PROJECT PRODUCT</th>
<th>PROJECT TOPIC #1</th>
<th>PROJECT TOPIC #2</th>
<th>ACADEMIC SUBJECT</th>
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<td>Faculty/Staff Develop</td>
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**PROJECT DIRECTOR**

Bert Edwards, Instructional Support Supervisor

**PROJECT SUPERVISOR**

Mary C. (Kit) Foster, Dean Academic Support

**PROPOSAL DESCRIPTION**

This project provides for the establishment of a revolving loan fund for faculty and administrators to use in purchasing a computer and a printer. Loans will be repaid over an 18-month period and subsequent loans will be made with these repayments. Faculty who participate will take a required 10-hour in-service training program through the Faculty Computing Center. This training will concentrate on word processing, spreadsheets, graphics and presentation programs.
San Diego City College proposes to borrow $20,000 to fund a loan program which will enable certificated, tenured faculty, and administrators, who participate in a computer training program, to purchase a personal computer, software, and a printer. During the first year of the program, the college will negotiate a discounted price for the IBM PS/2, Model 55sx computer, a letter quality dot matrix printer and/or laser printer. Initially, the college will loan 12 faculty $1650 each to be repaid over 18 months. As the loan fund is replenished, additional loans will be made to interested faculty.

Each faculty member granted a loan will be required to participate in 10 hours of inservice training offered through the college Faculty Computing Center. Faculty may select among a number of workshops offered including beginning and intermediate word processing, spreadsheets, graphics, and presentation programs. In addition, participants will attend workshops and seminars offered by IBM on ways of incorporating the computer in instructional programs, especially in community colleges.
1. Specific Educational Program Being Addressed

1. Programs and services addressed by the proposal

Many faculty view the computer as an "alien" tool, a technological device that is beyond their ken. These faculty will need specific training in the use of computers and extensive "hands on" practice with applications that are useful in order to demystify computers and computing technology. In considering strategies for insuring that students understand computers and learn to use them, it is important to be as concerned about what teachers do not say as what they do say about computers in the classroom.

Faculty who use computers themselves are in a far better position to understand the impact of computers on society as a whole and, as a result, to devise ways of ensuring that students see computers as an integral part of modern life. It is not enough for the faculty in the Computer and Information Sciences, Office Education, and other technical areas to understand the significance of computing; everyone in the college needs to be comfortable with computing if we are to ensure that our students are computer literate.

a. Improving the teaching abilities of faculty members

This proposal addresses the need for intensive inservice education in computing and related technologies at City College. Project ACE (Academic Computing Everywhere), proposes to strengthen faculty development efforts by offering certificated staff who participate in a series of workshops the opportunity to purchase equipment that is identical to the equipment that they are learning on at the college.

Teaching faculty to use applications which will allow them to do their jobs more efficiently is a necessary first step on the path toward getting faculty to use computers in the instructional process. Once faculty begin using word processing, simple spreadsheets and other labor-saving applications, they will be ready to learn applications which will enable them to monitor student progress, follow up on the students in their programs, generate newsletters, and develop independent study units. These faculty will also be more likely to talk to their
students about the benefits of word processing applications, for example and will understand, as well, how best to design assignments so that students are able to begin using computers to complete the assignments.

b. Improvement in traditional instruction programs

The potential for improving instruction using computer technology is enormous, but it will be impossible to tap that potential until college faculty and administrators are able to participate (both personally and professionally) in activities which lead to an understanding of how technology has transformed the workplace and how it may transform the learning environment. Workshops in strategies for using the computer to improve instructional programs will be included in the required training program. Model programs for integrating computers across the curriculum will also be presented. In addition, faculty will have the opportunity to visit business and industry sites to learn how computers are utilized in various contexts.

Strengthening academic computing is a top priority at City college. A Title III grant for strengthening academic programs provides for the use of laser disc technology and computers to improve instruction in English as a second language courses. In addition, the library will go online in 1991-1992 with the installation of an automated, integrated library system. By January, 1992, three new computer labs will have been established at the college using instructional equipment funds offered through the Board of Governors.

City College is also applying to the IBM Corporation for a grant of five computers for faculty use. These computers will be available for faculty use and for training on campus. In addition, we expect IBM to provide workshops on computers in education, computers in the Community Colleges, Toolbook, and computerized multi-media applications for the classroom. Thus, faculty in every discipline will have the opportunity to learn how to use computers to improve instruction in their programs.
2. Specific Problems Being Addressed

Specific Problems Addressed by the Proposal

a. Need for students to be able to understand and use computers

It is well understood that the successful person in the 90’s will be comfortable with and able to use computers. Unfortunately, the students who have the greatest need for experience with computers are those who are least likely to use computers. Students from families in the lower economic strata and from under-represented groups at City College are not likely to have computers at home, nor is it likely that they will have used computers in high school. It will be very difficult for them to begin using computers without intensive support and guidance from their instructors. And, faculty who do not use computers themselves are not likely to be able to lead students to use them.

b. Need for computing equipment for faculty

City College has invested $400,000 in new instructional equipment in the past two years, creating three new computer labs and upgrading a fourth. In order to maximize the use of these instructional facilities, faculty need to be educated in the use of computers, especially in classroom and other instructional applications. Funds for non-instructional equipment are scarce, however, so there are only four computers in the faculty computer center. An IBM grant may give the college an additional five computers, but nine computers are not sufficient for two hundred contract faculty. This loan will allow City College to loan funds to faculty to enable them to purchase personal computers. Faculty will receive training in the use of the computer at the college and will have their own computers at home on which to practice and develop proficiency.

c. Need for extensive time on task

Anyone who has tried to learn to do a task on a computer understands the incredible amounts of time needed for learning and practice. Ten hours of instruction must be countered with thirty to fifty hours of practice in order to get beyond the level of frustration. Faculty who have taken workshops at the college in word processing and spreadsheets have asked for computers in order to become proficient and to be able to take advantage of the power of the computer. Faculty generally spend more time at home working on school-related matters than they spend in their offices. Thus, allowing faculty to purchase their own computers appears to be an ideal solution to a number of difficult problems.
3. Population To Be Served

Population to be served by the Project

The target population for this project will be certificated faculty and managers who have little computer experience and are interested in purchasing a computer and learning how to use it. The college is especially interested in involving those faculty at the college who are naive with regard to the computer and who have contact with large numbers of students (e.g., those faculty in English, humanities and the social sciences). Ultimately, of course, we expect the project to impact students because of the strong influence faculty exert on students.
4. Objectives

Proposal Objectives

a. To encourage and facilitate the purchase of computers by contract faculty, and administrators, at San Diego City College.

b. To instruct faculty, and administrators, in the use and application of computers in education.

c. To evaluate the effect of computer ownership on the participants' instructional programs.
[NO “WORKPLAN” ACCOMPANIES THIS DOCUMENT.]
6. Expected Outcomes

Expected Outcomes

a. Project Objectives (See Work Statement Form.)

It is expected that at least 12 faculty will participate in this program. It will be possible for at least 18 additional faculty to participate in the loan program if the program is successful. It will also be possible to develop a loan program to support the purchase of Macintosh computers in Year Two if the initial program is successful.

It is expected that at least 12--18 faculty will participate in the intensive training workshops offered through the Learning Center and in the IBM workshops and seminars. At least three participants will participate in the League for Innovation Computing Conference in San Diego in November.

b. Impact of the Project

The greatest impact of this program will be on the general attitude of the faculty toward computers. Many faculty have requested assistance in getting computers for their own use. This loan program will provide the opportunity to purchase a personal computer and will provide a great morale boost to those people who have been trying to break into the computer age.

Computers will also become much less of a mystery to those faculty in the arts and social sciences; this change will have a very positive impact on the campus environment. It is expected that the use of computers will be perceived as a natural part of the academic world and that faculty will be instrumental in leading students to understand and use the new technology.

City College has made a strong commitment to strengthening academic computing on campus. Three new labs serve the Math and Science areas, computer and information sciences, and office education. In order to increase the use of these labs, English, ESL, and other basic skills classes could be offered in the labs following instructional models that have been developed in other community colleges. This program will allow the college to cultivate faculty who will understand the potential value of computers and who will work to introduce new instructional models to the college.

c. Potential for Continued Support

The loan program will yield very concrete results—those faculty who participate will own their own computers and will be trained in their use. These effects will remain long after the loan is repaid.
d. Potential for Adaptation to Other Institutions

This program could easily be adapted to other institutions. Specific staff and/or programs could be targeted.
7. Evaluation Plan

Evaluation

Formative Evaluation

• Brainstorming sessions will be conducted each semester to allow faculty the opportunity to demonstrate ideas they have tried and to encourage other faculty to continue to try out new ideas.

• Demonstration sessions will be scheduled during the Flex days each semester to show how faculty are using computers in their classes and to enlist new faculty in the program.

Summative Evaluation

• The project will be considered successful if the following results occur:

  a. 80% of the participants report after three years that they use their computers for both personal and instructional purposes.

  b. Student usage of the computer labs increases.

  c. A minimum of 25% of the participants use their computers for applications other than word processing (e.g., graphics, telecommunications, spreadsheets).

  d. A minimum of 25% of the participants use the computers for classroom presentations or multimedia applications.
Dissemination Plan

Dissemination
All contracts, all training materials and schedules that are developed will be made available in the final report so that the program may easily be replicated by other colleges.
9. Budget Narrative

[NO “BUDGET NARRATIVE” ACCOMPANIES THIS DOCUMENT.]