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Consortium Project.

This project will be administered by Irvine Valley College. In preparing this proposal, Microsoft Corporation, Novell, Inc., and WordPerfect Corporation were contacted as a follow-up to recent staff development activities with the California Community College Business Education Staff Development Project and asked if they would like to participate in this effort to research needs by business and industry in areas such as:

Employee skills requirements including academic and vocational competencies

Best methods and timeframes for employees and potential employees to become trained

Current and emerging technologies

This survey will build on the structure and results obtained in the 1991-92 project awarded to Solano College entitled, Statewide Curriculum Survey of Business and Industry Requirements in Business Education. In addition, selected community colleges known to be interested in nontraditional instruction were contacted and asked if they would like to participate in a consortium effort. Their letters are attached as Appendix A. They clearly indicate the interest and value of the proposed project. Throughout the project, representatives of the consortium colleges that expressed interest in this proposal as well as all other colleges and the California Business Association will be encouraged to participate in implementing the Workplan. Thus, the project will not serve any single college or district primarily. While project activities will be supervised by the Dean of Economic Development at Irvine Valley College of Saddleback Community College District, project services and products will be available equally to personnel at all of California’s 107 community colleges.

Because of the interest expressed by colleges statewide in the project activities and products, every effort will be made to conduct additional workshops and to extend the dissemination of project products beyond what is specified in this proposal, as permitted by funds available for the project.
This application is for a Fund for Instructional Improvement (FII) faculty/staff development grant that will serve all California community colleges. The proposed project addresses the need to acquaint administrators, faculty, and staff at community colleges throughout California with nontraditional instructional methodologies in order to better meet the needs of business and industry.

This proposal addresses the Board of Governors' Basic Agenda Priorities Focus of Economic Development and Vocational Education with the specific initiative of reaffirming the Board's strong support of vocational education, which is equal in importance to transfer education. It is hypothesized that for some courses, the quality of instruction may be improved through nontraditional methodologies. This addresses another of the Board of Governors' initiatives of promoting excellence in the classroom in both teaching and learning. Because of students' differences in learning styles, it is further hypothesized that students will be challenged to increase their performance to the best of their ability through nontraditional instruction, another of the Board of Governors' initiatives.

In addition, this proposal is written also to address the Board of Governors' initiative to make vocational education more relevant and work with industry and the private sector to prepare students for employment.

This proposal focuses on the benefits of alternative delivery systems of education such as distance learning and other nontraditional instruction addressed in the Commission on Innovation study, "Choosing the Future: An Action Agenda for Community Colleges." This study explores the methodology for delivering instruction to students at home via television or electronic networks. One of the nontraditional instructional methods will be the use of modems to deliver the teaching/learning process.

The goals are to enable community college faculty and staff to benefit from: 1) research funded, in part, by Microsoft Corporation, Novell, Inc., and WordPerfect Corporation which will explore the ways and timelines business and industry would prefer courses be offered, 2) manual entitled A Guide for Delivery of Nontraditional Instruction for Computer Information Science, 3) field tested methodologies in a minimum of 10-12 units of coursework for teaching in a nontraditional mode by experienced faculty, 4) and workshops to assist faculty from California community colleges to
develop and implement nontraditional instruction at their own schools. The staff development activities will occur in workshops, conferences, and in one-on-one contacts at workshops and conferences.
This application directly addresses the areas of Nontraditional Instruction and Faculty and Staff Development service area by providing community college faculty, staff, and administrators with research regarding nontraditional instructional methodologies to better meet the needs of business and industry which will lead to the development of guidelines for delivery of nontraditional instruction for computer information science programs. This guide will provide the results of the research applied to nontraditional instruction, the results of field tested methodologies, the facilities needed for such methodologies, faculty skills and knowledge, and other needed elements for successful instruction.

In the workshops and conference sessions where the results of the project will be presented for Staff Development Programs and Services, faculty will acquire information concerning the development of new courses. It is planned that the Curriculum Standards Handbook and other curriculum development tools such as the database of Business Education course outlines available at Irvine Valley College will be used for this process.

This project relates directly to the Board of Governors initiative to make vocational education programs more relevant and work with industry and the private sector to prepare students for employment. The Board of Governors' Basic Agenda item of economic development and vocational education is specifically addressed.
The specific problem is the need to identify the following:

Whether nontraditional instruction better meets the needs of business and industry in employee training and retraining.

Whether nontraditional instruction may improve enrollment, attendance, and retention of students.

Types of effective nontraditional instruction.

Requirements for effective delivery of nontraditional instruction.

This proposal provides California community college administrators, faculty, and staff with information to allow for delivering nontraditional instruction for computer science programs. For example, perhaps shorter more intensive courses will be equally as effective but better attended with better retention. Perhaps ways can be developed to adapt traditional three-unit courses into combination lecture and computer-based training courses with fewer hours of meeting time and units thereby providing more productive and less expensive instruction. Distance learning through modems may be an effective method of instruction. Although community college personnel are sometimes reticent to venture into the unknown on course offerings and structures, at the same time, they appreciate ways to improve enrollment, attendance, and retention. It is suggested that even though this proposal is specifically written for computer information science programs that the information is also applicable to science, math, other business education programs, and technology skills programs of varying disciplines.

This Application proposes to provide 1) a random sample survey asking business and industry statewide for information as to preferred methodologies and timelines for course offerings, 2) an analysis of the results of the study, 3) guidelines for nontraditional instructional offerings for computer information science programs, 4) field tests of as many methodologies as the resources of the project will permit, and 5) workshops and conference sessions to share information and curriculum revision processes.

The objectives of the survey are to gather data specified by the consortium directly related to nontraditional instruction, to
disseminate the data in a format easily translated into course offerings, and to share the information with Computer Information Science educators. The success of the survey will be based upon the consortium's ability to translate the needs of business and industry and well as other pertinent information to nontraditional instruction. The survey will be distributed to 5000 business and industry representatives by mail, telephone interview, and personal interview.
This project will directly serve administrators, faculty, and staff of the California community colleges, and through them, their students and business community. The residents and community members applying their skills to the employment market can be directly assisted by this project. These residents and community members will be people attempting to more easily become employable and/or promotable. Business and industry may benefit from excellent training for employees.

It is hypothesized that special populations may be well served with nontraditional instruction. It is further hypothesized that strategies may be incorporated which will promote gender fairness and improve services to the needs of a spectrum of special populations in order to ensure equal access to computer information science programs for all persons in all communities. For example, homebound students may be well served with learning via modems or computer-based training.
Objectives of the project are to:

1. By September 15, 1994, convene a consortium of at least 8 members made up of business and industry members as well as community college faculty.

2. By October 15, 1994, develop the survey instrument to be distributed to 5000 members of the business community statewide. All consortium members including the representatives of Microsoft Corporation, Novell, Inc., and WordPerfect Corporation have agreed to assist in the development of the questionnaire.

3. By November 1, 1994, print and distribute the survey to 5000 members of the business community statewide.

4. By December 15, 1994, collect the results of the survey.

5. By February 15, 1995, key and analyze the results of the survey and translate the results along with the guidance of the consortium to guidelines for delivery of nontraditional instruction for computer information science programs.

6. By June 1, 1995, field test as many of the methodologies as developed by the consortium.


8. By June 30, 1995, provide workshops and conference sessions to share the results of the work of the project. This training will be delivered at such workshops and conferences as the Annual Business Educators' Sharing Conference at Asilomar, the California Community Colleges' Chancellor's Annual Conference, the California Community College Association for Occupational Education, and the state conferences of CBEA (California Business Education Association) and other professional associations suggested by Chancellor's Office staff.

During the summer of 1994, project staff will plan the first consortium meeting. (Please see letters in Appendix A.)

To inform community college personnel about these upcoming activities, a letter will be mailed to the dean/Chair of Business and Computer Information Science Divisions inviting their participation in the consortium.

A survey instrument will be developed and distributed to 5000 members of the business community. The results of the survey will be collected, keyed, and analyzed. Field tests of as many methodologies as possible will be conducted. These results will then be translated into A Guide for Delivery of Nontraditional Instruction for Computer Information Science Programs. Workshop and conference sessions will then be given sharing the results and informing educators how nontraditional course offerings can be developed and implemented.
The project will result in these products: manual: A Guide for Delivery of Nontraditional Instruction for Computer Information Science Programs training workshops and conference sessions. The guide will be made available in print and on disk for the cost of reproduction for use by California Community Colleges' educators.

After the project ends, it is anticipated that colleges will continue to utilize the project training materials in working with course development and implementation.
The following methods will be used to evaluate achievement of the nine objectives:

Objective 1. By September 15, 1994, convene a consortium of at least 8 members made up of business and industry members as well as community college faculty. The consortium members shown on the Application Consortium Data Sheet will be contacted and invited to attend the first meeting on or before September 15, 1994. At this meeting work will begin on the development of the survey instrument. The minutes of the meeting will serve as documentation of the completion of the objective.

Objective 2. By October 15, 1994, develop the survey instrument to be distributed to 5000 members of the business community statewide. All consortium members including the representatives of Microsoft Corporation, Novell, Inc., and WordPerfect Corporation have agreed to assist in the development of the questionnaire. The survey instrument will be completed by October 15, 1994. The completed survey instrument will serve as the documentation of the completed survey instrument.

Objective 3. By November 1, 1994, print and distribute the survey to 5000 members of the business community statewide. Prepare the survey instrument for printing and distribution by November 1, 1994. This will include acquiring the list of 5000 recipients on a random sample basis. The consortium will be asked to determine the recipients to receive mailing or to receive telephone interviews. The printing and postage charges will reflect the completion of this objective.

Objective 4. By December 15, 1994, collect the results of the survey from a minimum of 5% of the recipients. The file of collected results will serve as the accomplishment of this objective.

Objective 5. By February 15, 1995, key and analyze the results of the survey and translate the results along with the guidance of the consortium to guidelines for delivery of nontraditional instruction for computer information science.
programs. The study analysis will document the completion of this objective.

Objective 6. By June 1, 1995, field test a minimum of five of the methodologies as developed by the consortium. Based upon the recommendation of the consortium, as many of the methodologies will be field tested as possible with the results of the field test recorded. The recorded results will provide the documentation for completion of this objective.


Objective 8. By June 30, 1995, provide workshops and conference sessions to share the results of the work of the project. This training will be delivered at such workshops and conferences as the Annual Business Educators' Sharing Conference at Asilomar, the California Community Colleges' Chancellor's Annual Conference, the California Community College Association for Occupational Education, and the state conferences of CBEA (California Business Education Association) and other professional associations suggested by Chancellor's Office staff. The occurrence of the workshop and conference sessions with the evaluation forms of the attendees will document the completion of this objective.

Objective 9. Evaluate the project. The project evaluation report will summarize data collected for each objective; identify problems, effective methods, and successful outcomes; and make recommendations.
Products to be disseminated:

A manual, *A Guide for Delivery of Nontraditional Instruction for Computer Information Science Programs* which reports the results of the survey for nontraditional instructional methodologies and the field test of various methodologies, the facilities required, faculty skills and knowledges, and other requirements.

Dissemination Activities

1. Workshops and conference sessions that share the results of the study and inform faculty about the development of nontraditional course offerings.

