93-0040
Vista

Communication Arts and Information Technologies

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Consortium Project.

Creation of an efficient business-education partnership will be an essential ingredient in the success of the proposed project. A working Advisory Committee will be active in providing vital feedback in curriculum design, in ensuring that assessments of hardware and software specifications are in accord with projected industry needs, and in refining the curriculum and program offerings to obtain maximum benefit for students and future employers. In addition, private industry consortium partners will provide guest lectures, internships, and employment opportunities for graduates, as well as industry contact for faculty.
This proposed two-year small grant/loan project will develop an innovative and interdisciplinary program in business communications using a faculty team with members from Computer Information Systems and Business, English, and Art. A private industry advisory committee will also provide support and guidance. This project development strategy --- teaming an interdisciplinary faculty with private industry partners for purposes of program design and curriculum development-addresses a systemwide need to create streamlined, effective, state-of-the-art vocational programs with infused academic skill development and adaptability to changing private industry needs.

By disseminating statewide a final report on the development of the business-education consortium and the curriculum material/design specifications, this project will help meet the statewide need for relevant vocational education in arenas of rapid technological change.
The project addresses two eligible areas defined by the Fund for Instructional Improvement as priorities: program development, and economic development and vocational education. The project also addresses several areas defined by the Fund as being of interest to the state: the development of strong degree and certificate programs in transfer and vocational education; the provision of relevant vocational education to train people for future, more "Complex jobs; cooperative efforts between business and education to keep vocational education relevant; recruitment of faculty from the ranks of industry; and providing flexible programs to improve the access of students with families and jobs.

The program proposed herein will essentially replace the traditional training students receive in vocational business programs which have emphasized business English, word processing, and office routines. Students completing the proposed two year program will obtain a strong foundation in English grammar and technical writing; they will know how to use a variety of computer software applications used in business such as word processing, computer graphics, and desktop publishing as well as computer hardware such as scanners and CD-ROM; and they will gain foundational literacy in art, graphic design and other aspects of visual communication. In short, they will be well-prepared to assume job responsibilities in today's business offices where breadth of knowledge and versatility are highly valued.
Vocational business programs need to provide more relevant training for entry level workers as well as retraining for those currently employed. Furthermore, business training programs need to provide workers with the best prospects for long term employment by providing both academic and technical preparation for employment. As the tech-prep movement in education suggests, well-educated employees who have sound language and math skills, as well as applied technical skills, will be more likely to adapt to the changing employment opportunities available over the course of the average lifetime.

Enrollment in traditional secretarial courses and even word processing classes is no longer sufficient to prepare people for long term employment in business. As the micro-computer revolution has progressed, the complexity of the tasks required of information workers—those who were formerly called secretaries, typists, word processors or computer operators—has increased substantially. More often, small and large businesses are seeking entry-level employees who have received strong preparation in written communication, who have visual literacy and assimilative capability, and who have a working knowledge and familiarity with the computer applications now on the market. These skills and abilities combine to enable the well-trained individual to produce clear and effective business communications using the available technology.

While much is written about colleges' need to update their vocational curriculum and make courses more relevant to the labor market, little has been done to upgrade computer technology programs by integrating technical and academic skills. Many colleges now offer curricula in each of the disciplines of computer information systems, art and design, and writing, but no program exists which specifically integrates these three communication arts. The Vista program will therefore serve as a model for other programs in communications statewide, and the course outlines and program configuration will be shared with other community colleges.

Preliminary surveys of Bay Area businesses and industries confirm that these organizations need employees with the versatile skills to be provided through the proposed program. Recent data also indicate that Alameda County's fastest growing job sector is service industries. Many of the new service sector jobs include 'that portion of the business service group encompassing computer services of all types. The development of the computer has led to a
multitude of constantly evolving business applications and has created a need for various computer specialists." (State/Local Cooperative Labor Market Information Program Projections, 1989-91, p.10) The proposed program will contribute to the economic development of the college’s service area by providing education to upgrade the skills of people already employed as well as persons new to the labor market.

The deepening microcomputer revolution has changed the modern workplace in significant ways: increasingly, computers are used as important tools in all aspects of business and work. In information/service industries, the fastest growing sector of the economy, as well as all other industries and the public employment sector, use of the computer for communication has increased the technical skills required of employees. Communication and information have become more important both as an organizational product of the service industry and as a means of carrying on organizational activities such as organizing and training, marketing to clients, and engaging in trade.

Employees formerly charged with using the computer as a typewriter are now expected to be familiar with a variety of software packages. Desktop publishing has brought in-house the task of producing publications, and employees in many workplaces need to have skills in desktop publishing, writing and editing, and document design. In the future, jobs in information creation/distribution are likely to become more complex as organizations use multimedia to present information. Workers of the future will need integrated skills in visual and written communications, as well as computer technology to succeed in the workplace.

Although most organizations and businesses have made investments in computer hardware and powerful software programs, both large and small firms report a dearth of entry-level employees prepared to understand and use this technology to its full potential. Service bureaus who work closely with businesses’ in-house artists, designers, writers and clerical workers often find their work hampered by inadequate use of software and hardware. And as companies downsize and the competitive business environment drives them toward greater efficiency, versatile and flexible employees who can produce a variety of information documents are more valuable than the specialized workers of the past.

PROJECT SOLUTIONS TO THE PROBLEM
This project has three major ways of approaching the problem of providing relevant vocational education that prepares students for
long term as wen 'as short term employment.

1. Integration of Academic and Technical Training.
The current disjuncture between school training and industry needs is quite apparent. Typically, college faculty teach in disciplines that are relatively static and theoretically isolated, while in industry, integrated and applied skills are necessary. Hence, this program seeks to integrate the technical skills of microcomputer use with the "academic" skills of sound writing and art and design. In print and visual media, all three skills are necessary.

To deepen the academic content of the program, a core curriculum of courses in technical writing, art/visual communication and computer skills, combining graphics and desktop publishing, will be designed and taught by interdisciplinary faculty from the English, Art, and Computer Information Systems departments at Vista Community College. It is important to note that in all classes designed for this program, use of computer technology is the unifying principal, and course design and implementation is by its very nature interdisciplinary.

All core courses will be taught on the computer or using the computer to demonstrate key concepts. While students will be able to specialize by taking electives related to technical communication in any of the three discipline areas, all students will take core classes first. In addition, the curriculum will have a seminar or overview class that introduces students to both the hardware and software common to the modern business or office. This course will be updated each semester as technology changes and will use guest lecturers from industry; it will thus serve, and be available, to program completers, who wish to come back and brush up on the newest technology applications.

Preliminary discussion among faculty has suggested the following courses may serve as this core curriculum:

Language skills English 1A; Expository Writing; Technical Writing I and II.

Visual Communication Visual Literacy; Color, Design and Composition; Graphic Design.
Business /Computer Information Systems: Computers in Communications (a seminar); Computer Resource Management; Introduction to Desktop Publishing.

The new courses among these core offerings will be developed and field tested during the first year of this grant.

Additional courses, designed to provide specialization in technical writing, computer art/graphics, and computer software and hardware applications, will be developed in the second year of the grant. Some will be short term or Saturday classes, designed to serve students whose work and home lives make attending college complicated. Possible courses include the following:

Language skills: Editing; Copy Editing; Magazine Publishing & Production.

Visual Communication: Computer Imaging with Photography, Illustration, Painting, and Drawing, Animation.


The program will be designed to offer certificates and or Associate degrees in Communication Arts and Information Technologies, but classes will also be transferable to four year institutions wherever possible.

In this program, a partnership between industry and the community college is essential for success. Both the rapidly changing technology and the need for an integrated approach to electronically-based communications makes a consortium with industry the best means of addressing the problem.

A key course in the curriculum will be the seminar, Computers in Communications, which will use guest lecturers from industry presenting such topics as the latest software applications, the use of hardware such as scanners and photo cd's and the application of same to communication documents such as corporate reports, publications, manuals, letters, etc. Vista is well placed to recruit such instructors; software firms abound in Berkeley and multi-media gulch in nearby San Francisco also will provide access to industry experts.
Vista currently hires a large proportion of part time instructors in vocational programs. By employing these guest lecturers from the business consortium, Vista will ensure the program’s continued relevance and dynamism.

Clearly, the rapid technological changes occurring in the computer industry will require that faculty be linked closely to industry so that they stay abreast of the technical changes and industry ties are critical to the continued success of the program.

Specifically, Vista College will develop a consortium with business/industry groups to

- Define the content of core curriculum classes and to serve as a continuing advisory committee on program improvement;
- Serve as guest lecturers and specialized instructors, and to provide constant involvement necessary if the program is to remain current;
- Identify employee communication training needs and opportunities for student internships;
- Establish opportunities for Vista instructors to update their knowledge of skills needed in the workplace;
- Evaluate student learning and skill development with proficiency testing;
- Assist in job placement for program completers.

3. Developing curriculum that enhances students’ abilities to continue to learn and adapt to rapidly changing computer technologies.

In the short term, students will be prepared for immediate jobs. In the long term, the training must teach the students how to broaden and deepen their knowledge and skills within the industry so that their skills remain relevant over their work-lives. To that end, the curriculum will include teaching students how to read manuals, to read and learn from popular publications, and to use available means (technology fairs, for example) to learn more about emergent hardware, software and applications. Field trips will acquaint students with local sources of hardware and software. A key seminar in computer and communications, taught with strong participation by industry representatives, will be repeatable so that when new technological
leaps occur, continuing or completed students can join with new students in learning about those changes. The program’s use of half, one, and two unit courses as well as evening and weekend scheduling will ensure that other courses that provide updated information will be available to persons who also work.
There are four distinct groups of students who will gravitate to this program:

Recent high school graduates;

Reentry students desiring to obtain skills for work;

People currently employed in office-skills areas such as wordprocessing, clerical work, printing shops, etc. who want to upgrade their skills; and

Persons recently unemployed who need to retrain.

As indicated earlier, the rapid changes in information work that have been caused by the microcomputer revolution have increased the complexity of work for students who formerly were able to obtain steady employment after completing a typical college business program. In the short term, the curriculum outlined above win give all four categories of people immediately relevant technical skills as well as a solid grounding in visual and language communication. In the longer term, the curriculum will teach students how to continue to learn about technological changes in their field, and will provide some courses that can be taken repeatedly for upgrading skills.
Objective 1
Task. Develop an Education-Business consortium to consult and support the various aspects of this project.

Completion Date. October 1, 1993

Bench Mark Standards. Ensure that functional curriculum advisory committee is in place. Additional firms and individuals should be identified for use in guest lecturing, etc. Maintain consortium operations throughout life of project.

Objective 2
Task. Design and field test a comprehensive, integrated curriculum in Communication Arts and Information Technologies in two one-year segments.

Completion Date. Spring, 1994 and Spring, 1995

Bench Mark Standards. Ensure that overall program and specific courses are designed and/or taught as required and that review process is completed in a timely fashion.

Objective 3
Task. Design specifications for, purchase, configure, and install needed hardware and software (including upgrade and incorporation of existing equipment).

Completion Date. January 15, 1994

Bench Mark Standards. Ensure that equipment is in place for initiation of teaching in Spring 1994 term.
The annual workplan is detailed in the attached "Application Annual Workplan and Performance Indicators" forms. The workplan involves three primary activities: (1) setting up and working with an industry advisory group which will assist the project throughout its life; (2) Designing and installing hardware and software; and (3) developing, field testing, evaluating, and refining curriculum. A general cost breakdown by activity is as follows: the cost of planning activities related to setting up the Consortium is estimated at $1,530 and will be absorbed by the College; program and course development expenses for the first year are estimated at about $9,000 for faculty with another $8,100 in in-kind expenses from private industry partners; an additional approximately $2,000 will be spent for the Project Director's salary to coordinate the activities of the Consortium and faculty. Equipment costs including software are estimated at $46,500, most to be financed through the FII loan; an additional approximately $9,000 will be spent for classroom instruction/field testing of courses in the first year; other expenses include supervisor's salary, clerical support salary, fringe benefits for faculty and staff, and materials and supplies.
As noted in earlier sections, the objective of this two-year project is to develop an innovative and interdisciplinary program in business communications, guided and supported by an education-industry consortium, which will be a streamlined, effective, state-of-the-art vocational program with infused academic skill development and adaptability to changing private industry needs. Project design and strategies for private industry participation, curriculum materials, hardware and software requirements, and significant findings will be made available to benefit community colleges throughout the State of California. Because the project design emphasizes the development of a relatively limited number of specific interdisciplinary core courses to be supplemented with widely available electives, project planners believe that the program will be highly adaptable to other colleges.

Since the project will result in an ongoing vocational curricular certificate program, there is no question regarding its long term institutionalization.
Formative evaluations will be performed throughout the project, as is indicated in the Annual Workplan and Performance Indicators. A summative evaluation will be performed in the last month of each year of this two-year project. The work statement objectives and activities will be assessed for completion. Problems incurred during the course of the project will be identified. Effective methods of teaching methodology and learning outcomes will be identified. A set of recommendations will be developed in conjunction with program review with the consortium partners for curricula refinements.
This project will provide two products that can be disseminated statewide. One will be a final report on the use of the business-education consortium in curriculum development and implementation, including a description of the types of firms/organizations that appear to be well-suited to the training program. A second product available for dissemination will be a course/curriculum guide for development of integrated language, visual and technical communication programs at other institutions. Vista proposes to make both products available for the cost of reproduction, and will announce availability through the news media provided by the California Community Colleges.

The products will remain available for one year, or until June 1996.