Title of Project: GRAPHICS LEARNING MODULES

Area of Project (Check One)

<table>
<thead>
<tr>
<th>Research</th>
<th>Vocational Guidance and Counseling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplary &amp; Innovative</td>
<td>Vocational Education Personnel Training</td>
</tr>
<tr>
<td>Curriculum Development</td>
<td>Overcoming Sex Bias and Stereotyping</td>
</tr>
<tr>
<td>Dissemination</td>
<td></td>
</tr>
</tbody>
</table>

Topic of Project: Development of software for Graphic Program.

Name of Agency: Santa Barbara City College

Address: 721 Cliff Drive, Santa Barbara, CA 93109

Superintendent or Authorized Agent: Dr. Glenn G. Gooder, Superintendent/President

Signature of Supt. or Agent: [Signature]

Date: 12/12/77

Duration of Project: 1 1/2 years

Proposed Starting Date: January 3, 1978

Proposed Ending Date: June 30, 1979 (Not After June 30, 1979)

Funds Requested: $4,700

Project Director: John Morrisohn, Graphic Communications, (805) 965-0581, Ext. 222

Person who prepared this proposal: Melvin J. Elkins, Asst. Dean, Occupational & Career Education

Date Transmitted: [Date]

State use only:

Received: [Date]

Initial: [Initial]

Notified: [Date]

Initial: [Initial]
INSTRUCTIONS AND FORMAT FOR PREPARING A PROPOSAL
UNDER SUBPART 3 OF P.L. 94-462

Prepare each proposal in the format provided, using the headings indicated. Start each heading on a separate page, and include as many pages as you need for your proposal. Try to communicate clearly and succinctly, and avoid professional jargon, catch phrases and acronyms.

Ten copies of the application must be submitted, and each copy must have an original signature of the district superintendent or authorized agent.

The prescribed cover sheet must be on each copy of the proposal.
CALIFORNIA STATE DEPARTMENT OF EDUCATION
AND
CHANCELLOR'S OFFICE, CALIFORNIA COMMUNITY COLLEGES

Statement of Assurances Under Title II,
Part A, Subparts 3 and 5 of Public Law 94-482

This is a statement that the agency or party applying for federal funds under
Subpart 3 or Subpart 5 of the Act for purposes indicated elsewhere in this
proposal agrees to the following assurances:

That the vocational education project described in this proposal
shall be established and maintained in accordance with the Act,
Federal Regulations, California Five-Year State Plan for
Vocational Education, and State of California Education Code
and Administrative Code.

That the vocational education project described in this proposal
shall be in compliance with Titles VI and VII of the Civil Rights
Act of 1964, the California Fair Employment Practices Act, and
Chapter 4 (commencing with Section 30), of Division I of Title 5,
California Administrative Code. Form HEW 441, a statement of
compliance with Title VI of the Civil Rights Act of 1964, was
dated and filed with the California State Department of Education
or with the Chancellor's Office of the California Community
Colleges on February 18, 1965.

That the vocational education project described in this proposal
shall be in compliance with Title IX (Nondiscrimination on the
Basis of Sex) of the Education Amendments of 1972.

That any programs/services for handicapped persons enrolled in
vocational education that are affected by the project described
in this proposal shall be in compliance with the Education of the
Handicapped Act, Section 613(a) and the Rehabilitation Act of 1973,
Section 504.

(Signed) (Authorized Agent) (Date: 12/12/77)
Dr. Glenn G. Gooder
(Title) Superintendent/President

(Address): 721 Cliff Drive, Santa Barbara, CA 93109

Telephone: (805) 965-0581
Abstract

Santa Barbara City College has just completed an audio-tutorial facility which will serve some eight different majors in occupational education. This facility is equipped with audio visual playback units so that students may use same in reviewing of class assignments or to work independently.

One problem with the Learning Center, however, is our inability to purchase software for specific instructional areas. In this particular case, one of the areas where we have not been able to purchase commercially prepared software is in the Graphic Communications area; therefore, we are submitting this curriculum development request.

Furthermore, by developing learning modules for specific tasks in Graphic Communications students would be able to learn at their own rate while working in the campus print shop.
Need

A careful review of literature and materials concerning the development of programmed materials indicates an absence of validated materials in the area of graphic production. The problem is that little evidence or information is available to indicate that thoroughly validated instructional modules are available in the area of graphic production that can be utilized by postsecondary instructors in occupational and career education classes.

This project is designed to develop personalized instructional materials that will allow all students to progress through the course at his or her own pace. This would be a great improvement over the traditional methods of instruction.
Goal

The purpose of this project is the development and testing of a complete set of personalized instructional modules for graphic production at the community college level. The modules will follow the flow structure indicated in Appendix A, and the modular instructional programming system as indicated in Appendix B.

A module will be developed for some of the following areas: Typography, Letterpress, Design, Paste-up, Process Camera, Screen Process Printing, Specialty Operations (Hot Stop, Rubber Stamp), Stripping and Platemaking, Basic Offset, and Paper and Binding.
Objectives

To develop a package of programmed learning materials that will result in at least 90% of the students who complete the modules demonstrating a satisfactory proficiency level as indicated by their performance on the pretest-posttest evaluation.

To field test this package of programmed learning materials at the community college level using the Research and Development process.
Procedures

a. Product Selection - description of product and outline of contents and use.
   completed

b. Literature Review - review of relevant work elsewhere.

c. Prototype Planning - development of module specific objectives.
   (1 month)

d. Develop Preliminary Prototype - instructional format, model lessons, projects, information and procedure sheets, evaluation devices.
   (4-5 months)

e. Preliminary Field Test and Module Revision - initial qualitative evaluation by panel of experts and revision on the basis of results of this evaluation.
   (1 month)

f. Main Field Test and Revision - test on small group of students to determine if specific objectives are met.
   (1 month)

g. Operational Field Test - test on a large group of students under practical field conditions.
   (2 months)

h. Compile and submit final report to Chancellor's Office, California Community Colleges.
   (1 month)
Dissemination

This project will be made available to graphic arts departments in the California Community Colleges.
Evaluation

The effectiveness of the instructional modules will be determined by calculating the percentage of students attaining a score of 80% or better on the posttest for each unit. To establish pre-instructional posttest results, the Pearson Correlation Coefficient procedure will be applied to pretest and posttest scores of each unit for the total sample to determine the standard deviation of the means of each test.

Then, a T-test will be implemented to determine if the significant difference between the posttest and pretest will be significant beyond the .0005 level for the population tested. The instruments will be free from sex bias.
List of Personnel

JOHN P. MORRISOHN, project director
10 years of trade experience in graphics
B.S. - Oswego State University
M.A. - Sacramento State University
17 years of teaching experience in graphic arts
Presently working on doctorate in the area of trade and technical education
Has worked on several curriculum and research projects in graphics

The hourly staff used on this project other than the director will be women or minority persons.
Description of Facilities

A resource center is provided to accommodate some 25 students desiring self-paced instruction in their particular occupational subject area. Some 800 sq.ft. of floor space includes the following equipment:

Twenty-two study carrels, work surface of 36" x 48". One row of six, back-to-back and one row of five, back-to-back. Twenty stations equipped with rear-screen synchronous sound slide projector and earphones. Television video cassette playback system on movable cart for use at a table in the front of the room and for use at other locations in the building. Equipped with audio panel for earphones usable by small group.

Also, in our Print Shop there are some 3,363 ASF to serve some 22 students desiring skills in off-set printing, pasteups, platemaking, duplicating, designing and stripping. This facility is also complemented with a full photographic laboratory providing for photo development and processing for some 28 students.
Related Research and/or Materials

GRAPHIC PRODUCTION RESEARCH PROJECT REPORT by John P. Morrisohn, Part C, VEA, 1977, Santa Barbara City College

GRAPHIC PRODUCTION LABORATORY PROJECT, (VE-1), 1967, Sacramento City Unified School District

Graphic Reproduction Techniques Course combining Business Education and Graphic Communications at Santa Barbara City College.
Budget

During 1977-78 Local District funds to support the Graphic Communications Program will amount to $48,974 in salaries, approximately $3,007 in supplies, and approximately $425 in repair of equipment and duplication of printed materials.

The total requested through VEA P.L. 94-482 funds is $4,700. These funds will be to augment our existing program in Graphic Communications for the duration of this project. Furthermore, please note that contract services will include art work and narration of scripts for the Graphic Communications slide film presentation and that materials will include basically the duplication of the printed modules.

The augmented budget summary is as follows:

<table>
<thead>
<tr>
<th>Classes</th>
<th>Local Funds</th>
<th>P.L. 94-482</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Salaries</td>
<td>$2,500</td>
<td>$2,500</td>
<td></td>
</tr>
<tr>
<td>Clerical Salaries</td>
<td>600</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Travel and Per Diem</td>
<td>$180</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>Other Supplies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Supplies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials</td>
<td>500</td>
<td>1,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Contract Services</td>
<td>600</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Indirect Expenses</td>
<td>68</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>$748</td>
<td>$4,700</td>
<td>$5,448</td>
</tr>
</tbody>
</table>
MODULAR INSTRUCTIONAL PROGRAMMING SYSTEM

START

SELECT MODULE

BEGIN TASKS

COMPLETE IN-PROCESS EVALUATION

IS EVAL COMPLETE?

YES

COMPLETE PROJECT

CORRECT PROJECT

NO

IS LEVEL MET?

YES

TAKE POSTTEST

REVIEW ITEM INFO

NO

IS LEVEL MET?

YES

MODULE COMPLETE

ARE ALL MODULES COMPLETED?

NO

YES

STOP

John P. Morrisohn