APPLICATION OF PART C AND D FUNDS
UNDER THE
VOCATIONAL EDUCATION AMENDMENTS OF 1968
P.L. 90-576

School Year July 1, 197 -- June 30, 197

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<th>Region</th>
<th>Code</th>
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<tbody>
<tr>
<td>Southern</td>
<td>Z</td>
<td>Santa Barbara</td>
<td>42</td>
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<tr>
<td>District</td>
<td>Santa Barbara Community College District</td>
<td>Code 69294</td>
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</tbody>
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Address
721 Cliff Drive, Santa Barbara, CA 93109

Superintendent
Glenn G. Gooder, Ph. D.

This application and Statement of Assurances, plus the current District Plan for Vocational Education, dated March 12, 1976, constitute a firm request for assistance from funds available through the Vocational Education Amendments of 1968, Public Law 90-576.

I certify that: All programs, services, and activities covered by this application will be operated in accordance with the Act, Regulations, Statement of Assurances, and the California State Plan for Vocational Education, except as noted.

(Signed) District Superintendent

Name John P. Morrisohn
Title Associate Professor
Project Director or Contact
Phone (805) 965-0581
Area Number
Code

Cmc.3 6.3-7 10/14/76
I. All programs, services, and activities covered by this application will be operated in accordance with the Vocational Education Act, Regulations, and the California State Plan for Vocational Education.

II. Compliance is assured with Title VII and IX of the Civil Rights Acts, the California Fair Employment Practices Act and Chapter 4 (commencing with Section 30) of Division 1 of Title 5, California Administrative Code. Compliance with Title VI of the Civil Rights Act of 1964 has been dated and filed __March__, 18, 1976.

III. It is mutually understood and agreed that no alteration or variation of the terms of this agreement shall be valid unless made in writing and signed by the parties hereto, and that no oral understandings or agreements not incorporated herein, and no alterations or variations of the terms hereof unless made in writing between the parties hereto shall be binding on any of the parties hereto.

IV. The State may terminate this agreement and be relieved of the payment of any consideration to the District should the District fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination the State may proceed with the work in any manner deemed proper by the State.

V. The state shall retain supervision and administrative control over the provisions of this agreement regardless of subcontractual agreements with private agencies, organizations, and institutions.

VI. If consultants are to be used, written confirmation will be obtained from the State prior to their employment.

VII. Federal funds requested in this application under the Vocational Education Act will not supplant state or local funds.

VIII. The necessary records will be maintained to document vocational education expenditures, programs, services, and activities set forth in this application. These records will be available for use in the preparation and submission of annual reports as required by the State, and for the regular post-audit of the district.

IX. Five (5) copies of a final report of the project, including findings and recommendations, shall be submitted to the State for approval within 30 days of the completion of the project. One of these five (5) copies shall be a photo-ready copy. The director of the project will submit a quarterly progress report to the appropriate state agency.
ABSTRACT describe the proposed project including statement of the problem, related priority, objectives, expected results, procedures, and use of findings.

This study will involve development, implementation, and evaluation of instructional modules in the graphic production classes at the community college level. The purpose of the study is to develop and assess the effectiveness of instructional modules in design, paste-up, and process camera following the Research and Development procedures.

The desired outcomes are to develop validated instructional materials in graphic production.

The flow structure of the instructional modules to be evaluated will consist of planned instruction (lecture, audio-visual, programmed, test), experimental project, and practical project. These instructional activities will be related to various types of learning (motor chains, principle usage, and problem solving). Internal modular evaluation will include in-process evaluation, project evaluation, and unit evaluation. We expect to find that these procedures and sequence are valid and could be applied to all units of programmed instruction in the area of graphic production.

Funds Requested

| LOCAL FUNDS | $300 | OTHER | 0 | VEA $2,500 | TOTAL $2,800 |
1. Identification of need
   (what is - what should be - discrepancy represents need)

   Programmed learning materials are appearing more and more in educational environments. These packages generally use a systematic method of delivery of content and process to achieve specified performance objectives on the part of the learner. A great deal of research and development is needed, however, to provide improved effectiveness in such materials and to provide means of evaluating them.

2. Statement of problem (how it fits into priorities)

   A careful review of literature 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 researched and validated instructional modules are available in the area of graphic production that could be utilized by community college instructors in occupational and career education classes.

3. Statement of desired outcomes in relationship to priorities

   The purpose of this project is the development of a set of individualized instructional modules for graphic production at the community college level and the validation of these modules through use in regular community college classes. The project will result in a set of validated modules which will be available for dissemination to other colleges.
4. Statement of performance objectives

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

To field test a package of programmed learning materials at the community college level using the Research and Development process described below.

5. Sequential list of activities designed to accommodate objectives

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

b. Literature Review - review of relevant work elsewhere.

c. Prototype Planning - development of module specific objectives.

d. Develop Preliminary prototype - instructional format, model lessons, projects, information and procedure sheets, evaluation devices.

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

f. Mainfield Test and Revision - test on small group of students to determine if specific objectives are met. Improvements made where needed.

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

6. Provisions for evaluation and use of findings

The effectiveness of the instructional modules will be determined by calculating the percentage of students attaining a score of 80% or better on the post-test for each unit. To establish pre-instructional need and as a comparison to the post-test results, the percentage of students attaining a score of 80% or better on the pre-test of each unit for the total sample will be calculated. Reliability - For this study, the reliability of each of the three criterion-referenced tests as data gathering instruments will be determined by calculating a split-half reliability coefficient. The pre-test scores will provide sufficient variance to justify the
use of correlating techniques. The tests will be divided into odd and even items. Scores (number correct) will be obtained on the two halves and a correlation obtained. The result is a reliability coefficient for half a test. Given a reliability coefficient for a half test the reliability coefficient for a whole test can be estimated using the Spearman-Brown formula. The criterion instruments should be analyzed to insure that the test items do indeed match the performance verbs in the unit objectives. This procedure will insure that the test items are validated contextually against the objectives they purport to measure.
7. BUDGET

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>LOCAL FUNDS</th>
<th>VEA FUNDS</th>
<th>TOTAL FUNDS</th>
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<td>Travel</td>
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<tr>
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<td>Management Fee</td>
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<td><strong>GRAND TOTAL</strong></td>
<td><strong>$300</strong></td>
<td><strong>$2,500</strong></td>
<td><strong>$2,800</strong></td>
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8. SUPPLEMENTARY INFORMATION

RELATED RESEARCH, PERSONNEL INVOLVED, CONSULTATION WITH STATE STAFF

JOHN P. MORRISOHN, PROJECT DIRECTOR

7 years of trade experience in printing
B. S., Oswego State University
M. A., Sacramento State University
16 years of teaching experience in graphic arts
Now engaged in the doctoral program at Utah State University.
This study will be utilized for part of my doctoral dissertation in the area of trade and technical education.