

DOCUMENT RESUME

ED 220 685

CE 033 706

AUTHOR Auvil, Mary S.
 TITLE The Impact of Vocational Education Special Projects in California Community Colleges. Issues and Implications.
 INSTITUTION California Community Colleges, Sacramento. Office of the Chancellor.
 SPONS AGENCY Department of Education, Washington, DC.
 PUB DATE Aug 82
 CONTRACT 80-184
 NOTE 120p.

EDRS PRICE MF01/PC05 Plus Postage.
 DESCRIPTORS *Community Colleges; *Cost Effectiveness; *Federal Aid; Followup Studies; *Outcomes of Education; *Program Effectiveness; Program Evaluation; Program Improvement; Two Year Colleges; *Vocational Education

IDENTIFIERS *California; Vocational Education Amendments 1976

ABSTRACT

A follow-up study was conducted to investigate the long-term impact of using nearly \$8 million of vocational education special-project funds in California community colleges. The study did not evaluate the projects themselves but assessed what had occurred afterward as a result of the funding. That is, the project identified and described program improvements brought about by changes or modification in college policies, administrative practices, instructional programs, and student outcomes that might be attributed to the special projects. Research activities included a review of project files from the Chancellor's Office and the State Department of Education; telephone and in-person interviews with representatives of the projects; a sample survey of project beneficiaries; and consultant-assisted site visits to a representative sample of the projects. Findings showed that about half of the money spent by the Chancellor's Office during 1977-79 was claimed by projects that have had a significant long-term impact in California community colleges. These were project services or programs initiated with vocational education project funds that had been continued at the institutions where they were implemented; personnel training activities that had contributed to the improvement of vocational education and related services at participants' colleges; and products and services that had been used by intended beneficiaries statewide. In addition, about one-fourth of the funds were used by projects where the long-term benefits were only marginal. The remaining funds were claimed by projects for which no evidence of lasting impact was found, although they may have had an impact while they were in operation. Issues were identified and recommendations were made for more efficient use of funds for similar projects in the future. (KC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED220685

THE IMPACT OF VOCATIONAL
EDUCATION SPECIAL PROJECTS
IN CALIFORNIA COMMUNITY COLLEGES

ISSUES AND IMPLICATIONS

AUGUST 1982

The activity which is the subject of this report was supported in whole or in part by the U.S. Department of Education. However the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Department of Education, and no official endorsement by the U.S. Department of Education should be inferred.

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Prepared for THE CHANCELLOR'S OFFICE, CALIFORNIA COMMUNITY COLLEGES
by MARY S. AUVIL

Contract Number 80-184

RECEIVED
SEP 16 1982
VOCATIONAL EDUCATION
SERVICES

CE 033 706

PREFACE

At the request of the Board of Governors of the California Community Colleges, a research study was initiated in November 1981 to assess the impact of vocational education special projects in California community colleges. The 142 projects studied received a total of over \$4.2 million from the California community colleges' share of federal vocational education funds for 1977-78 and 1978-79. The follow-up study has resulted in information about the long-range outcomes of these projects, identification and analysis of issues that influenced their impact, and recommendations for actions to increase the benefits realized from vocational education special projects in the future.

Many people provided information and other assistance in the impact study. The cooperation of over 300 project personnel, beneficiaries, state staff, and other educators who described the effects of the special projects was key to the success of the study. The study director was assisted in organizing and presenting the information they provided by Lynn Whitmore, who edited the body of this report. The validity of the study conclusions was enhanced through the participation of a consultant team of six former administrators of occupational education or student services, who accompanied the study director on site visits, assisted in data interpretation and the formulation of recommendations, and reviewed the draft report. The consultants were Dr. Nathan Boortz, who was formerly with the Foothill-DeAnza Community College District; Walter Brooks, on leave from Shasta College; William Steinberg, formerly with the San Diego Community College District; Irvin Colt, recently retired from Mt. San Antonio College; Jack Snyder, recently retired from Cabrillo College; and Glenn Van Noy, recently retired from Laney College. Dr. William Morris, the project monitor, provided guidance and support throughout the study.

CONTENTS

	<i>Page</i>
I EXECUTIVE SUMMARY	1
Summary of Findings	2
Issues and Recommendations	5
II BACKGROUND AND PROCEDURES	8
Background of the Projects	8
Procedures Used in the Study	13
III LOCAL PROJECTS	18
Subpart 2 Projects	18
Subpart 3 and 5 Projects	20
IV STATEWIDE PERSONNEL TRAINING PROJECTS	24
Preservice Education Projects	24
Inservice Education Projects	27
V PROJECTS RESULTING IN PRODUCTS OR SERVICES	33
Projects Resulting in Products	33
Projects Resulting in Services	36
VI ISSUES AND IMPLICATIONS	41
State-Level Coordination and Leadership	42
Development, Dissemination, and Adoption of Project Models and Products	46
Funding Policies	52
Appendix A. INDIVIDUAL PROJECT REPORTS	57
Introduction	57
Contents	58
Local Projects	62
Statewide Personnel Training Projects	77
Projects Resulting in Products or Services	89
Subject Index	104
Agency Index	105
Appendix B. INDIVIDUALS WHO PROVIDED INFORMATION	111

LIST OF TABLES

	<i>Page</i>
Table 1. Distribution of Projects to Agencies	10
2. Agencies Awarded Jointly-Funded Projects.	12
3. Distribution of Special Project Funds Awarded by the Chancellor's Office by Funding Category	13
4. Distribution of Subpart 3 and 5 Local Projects.	20
5. Status of Subpart 3 and 5 Local Projects.	21
6. Distribution of Preservice Education Projects	24
7. Distribution of Inservice Education Projects	27
8. Participation in 20 Inservice Education Projects , 1977-1979	28
9. Responses to Selected COPES Gender Equity Items, 1979-1982.	54
10. Distribution of Projects Resulting in Products.	33
11. Distribution of Projects Resulting in Services	37

LIST OF FIGURES

Figure 1. Amounts Awarded for Special Projects by the Chancellor's Office Under Subparts 2, 3, and 5, 1977-1981	9
2. Locations of VEA Special Projects Funded in 1977-78 and 1978-79 By the Chancellor's Office of the California Community Colleges.	11
3. Distribution of Projects and Amounts Claimed, 1977-78 and 1978-79.	17
4. Use of Gender Equity Resources.	36

I EXECUTIVE SUMMARY

In 1977-78 and 1978-79, the Chancellor's Office of the California Community Colleges awarded a total of nearly \$8 million in federal vocational education (VEA) funds to community college districts and other agencies in California for vocational education program improvement and supportive services, special programs for displaced homemakers, and ancillary services for consumer and homemaking education programs. Approximately \$3.4 million of these funds were distributed to all community college districts in the state based on an allocation formula. The remainder, nearly \$4.6 million, was used to fund 142 special projects in vocational education that were conducted by community colleges, other public agencies, and a few private firms. This follow-up study investigated the long-term impact of the uses of the special project funds in California community colleges.

As provided in the funding legislation, the Vocational Education Amendments of 1976, special project funds were awarded for research, exemplary and innovative programs, curriculum development, vocational guidance and counseling, vocational education personnel training, and consumer and homemaking education projects, as well as projects to serve displaced homemakers, the disadvantaged, limited- and non-English speaking students, and handicapped students, and to promote gender equity in vocational education.

The major objective of the impact study was to identify and describe program improvements brought about by changes or modification in college policies, administrative practices, instructional programs, and/or student outcomes that might be attributed to the special projects. In addressing this objective, several questions were explored: What were the direct and indirect effects of the projects? How were project activities continued after the special funding ended? To what extent did the long-term effects of the projects reach beyond the institutions that received the funding? What were some of the factors that seemed to increase or diminish project impact? Were some of the projects more cost-effective than others in terms of immediate or long-term impact?

Thus the purpose of the study was not to evaluate the projects themselves, but to assess what had occurred afterward as a result. Project proposals and reports were reviewed to obtain background information, but data collection was focused on the period after the federal vocational education funding expired. For this reason, positive outcomes such as benefits to students or others served during the funding period are not a focus of this report.¹

Research activities included a review of project files in the Chancellor's Office and State Department of Education, telephone and in-person interviews with representatives of the projects, a sample survey of project beneficiaries, and consultant-assisted site visits to a

1. A third-party evaluation was conducted of the 1978-79 projects at the time they were funded. Findings are summarized in *An Evaluation Study of the Outcomes of Vocational Education Special projects, 1978-79* (VEA project number 44-69740-3-9-851).

representative sample of the projects. Funding agency staff and reports of later projects were also consulted.

Of the 142 special projects that were funded by the Chancellor's Office in the two years, 96 were funded jointly with the State Department of Education. There was no community college involvement in 14 of these, so they were excluded from the follow-up data collection activities. When closely related projects and projects funded in 1977-78 that were refunded in 1978-79 were considered as single projects, 102 project entities were identified. Follow-up information was collected, analyzed, and is reported here for 102 special projects.

For purposes of reporting their outcomes and impact, the projects were divided into three groups: (1) local projects, (2) statewide personnel training projects, and (3) projects that produced products or provided services for colleges statewide.²

Recommendations were formulated with the advice of a consultant team of former vocational education and student services administrators, based on careful analysis of project effects and information about more recent projects. The study findings and recommendations which are summarized here are presented in detail in the following sections.

In interpreting the findings summarized here, these limitations should be kept in mind:

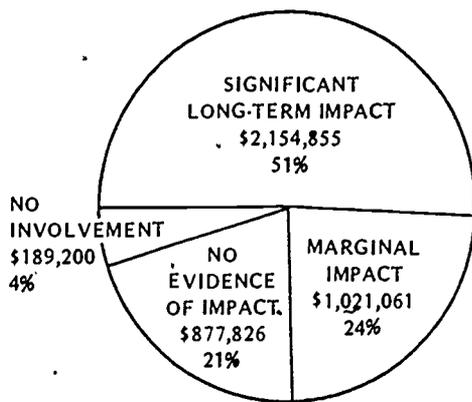
- In two-thirds of the cases, no documented information was available about how project activities had been continued, or how information resulting from the projects had been used after the funding period ended. Most of the data used were descriptive verbal responses of project staff and beneficiaries, based on their recollections.
- Except in a few cases where projects were continued intact, project activities and information had been merged with other activities and information, so that impact often could not be attributed solely to the projects.
- Budget constraints and other external factors beyond the control of college staff had often inhibited the further development or expanded use of project programs, products; or services.

SUMMARY OF FINDINGS

About half of the \$4.2 million spent by the Chancellor's Office in 1977-78 and 1978-89 was claimed by projects that have had a significant long-term impact in California community colleges. That is, project services or programs initiated with the VEA project funds have been continued at the institutions where they were implemented; personnel training activities have contributed to the improvement of vocational education and related services at participants'

2. The distribution of the projects and funds in these categories is shown in Figure 3 on page 17. Individual projects included in each category are identified in Appendix A.

LONG-TERM IMPACT AND COST OF PROJECTS STUDIED



colleges; products and services have been used by intended beneficiaries statewide.

About one-fourth of the funds were used for projects where the long-term benefits were only marginal, considering the amounts spent: only a few isolated instances of beneficial outcomes were reported, or products were used infrequently. The remaining funds were claimed by projects for which no evidence of lasting impact was found, or which did not involve community college educators initially. Some of these projects, such as the displaced homemaker projects that were not continued after funding ended, were effective and beneficial to clients while they were in operation. Therefore, they should not

necessarily be considered a poor use of the funds.

An important factor in the continuation of project activities and programs was the continuing presence of project staff. In June 1982, project directors or coordinators of 78% of the projects were still working in the district or agency that received the special VEA funds. Former managers of 11% of the projects were working elsewhere. The remainder (11%) were not located, and other sources of information were used.

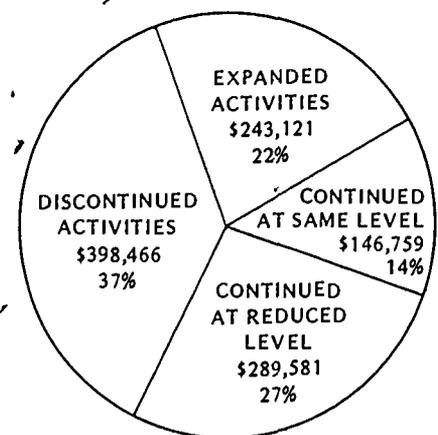
The following paragraphs highlight salient findings in each of the three major project categories: local projects, statewide personnel training projects, and statewide product- or service-oriented projects.

Local Projects

Status of activities. Over \$1 million were claimed by 34 projects that provided services or programs on a single campus or on a limited number of neighboring campuses. Since the project funding ended, eight of these had expanded activities or services initiated during the project period, seven were continuing at about the same level, and seven at a reduced level. Ten had ceased operations when the grant ended, and one just recently, when there was no longer a need for the program.

Programmatic, student, and community outcomes. Specific outcomes attributed to the local projects included addition and upgrading of instructional programs, provision of student services for new client groups, increased awareness and support from college administration for project goals, improved retention and placement of students, and better relations with industry and other institutions.

STATUS AND COST OF LOCAL PROJECTS



Availability of data. Less than half the local project representatives provided documented statistical evidence of ongoing impact. Very limited follow-up data had been collected by project personnel on the placement or success of student beneficiaries.

Infrequent adoption elsewhere. In spite of the fact that the *California Five-Year State Plan for Vocational Education* specifies that the project funds for program improvement will be used for projects that are applicable to other districts throughout the state, little evidence was found that other colleges had adopted programs or practices implemented by the local projects.

Statewide Personnel Training Projects

Types of training. Over \$1 million were claimed by 29 personnel training projects that subsidized preservice training for vocational education teachers or provided inservice activities for over 2,500 community college educators statewide.

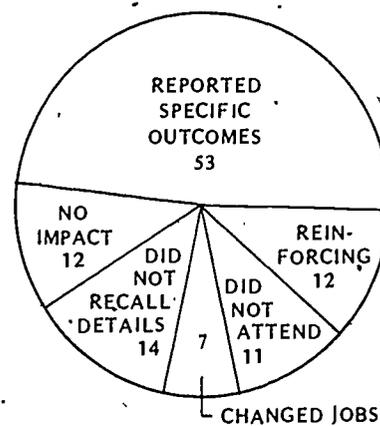
Preservice education effects. The impact on community college education of funds awarded to subsidize regular teacher training programs is usually indirect, as a large majority of the graduates go first into high school teaching. It is estimated that community colleges in the state recruit 55% to 70% of their vocational teachers from high schools. VEA-subsidized programs to provide training leading to the Designated Subjects Credential served over 3,650 community college teachers in the three-year period, 1978 to 1981.

Inservice education effects. Twenty-two cents of each special project dollar spent by the Chancellor's Office in 1977 to 1979 went for statewide inservice training activities. Although participants in the activities often said they had difficulty recalling these experiences which occurred two to three years ago, about half of the 109 who answered follow-up inquiries attributed specific outcomes to their participation. For example, they had used information obtained in the activities in planning new programs and modifying existing programs, justifying programs and program changes, improving evaluation, and improving services to special student populations.

Effective topics and training formats. Of the personnel training projects studied, those which appear to have had the most impact were community college or university based, made available in-depth information about specific topics, and used formats such as week-long visitations, graduate follow-ups, and two- and three-day meetings. Several served both high school and community college educators.

Factors limiting impact. Of the inservice training projects that appeared to have the least impact on community colleges, none were community college based. The explanation given most often by

RESPONSES OF FORMER INSERVICE PARTICIPANTS



college participants who said their participation had no impact on their college programs was that the inservice activities were oriented toward secondary education, or that they already knew or possessed the information or skills presented.

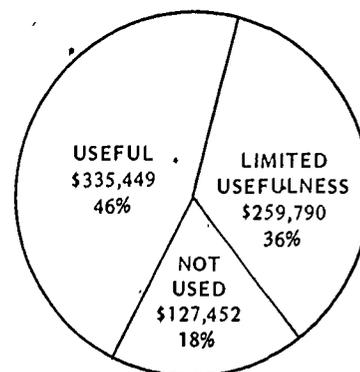
Projects That Resulted in Products or Services for Statewide Use

Types of products and services. Nearly \$1.8 million, or 43 cents of each special project dollar, were claimed by 39 projects that produced research reports, curriculum materials, career guidance materials, or resource materials for promoting gender equity statewide, or that made services available on a statewide basis.

Moderate to good use of products. Of the \$722,691 that was spent by the Chancellor's Office on projects that resulted in products for statewide use, 46% was claimed by 11 projects that produced products that were used as expected. Over one-third (36%) of the funds went to 12 projects that produced products that had only limited use by community college educators, and no evidence was found that products of the seven remaining projects had been used to the benefit of community college education.

Limited use of joint services. Of the nearly \$1.1 million that was spent by the Chancellor's Office in 1977-78 and 1978-79 for projects to provide services, about half was used for jointly-funded services that have been utilized infrequently by community college educators.

USEFULNESS AND COST OF PRODUCTS



ISSUES AND RECOMMENDATIONS

Several issues were identified which seemed to be strongly correlated to the success or failure of the special projects studied, in terms of their continuing benefits. The issues and recommendations pertaining to them are summarized below.

Issue: Inadequate state-level coordination and leadership in crucial project phases often led to reduced project impact.

Recommendations:

- Form semi-permanent advisory committees for each of the major areas that pertain to vocational education (e.g., research, guidance and counseling, handicapped, business education) to study priorities identified through the community college occupational program evaluation process (COPES), to plan projects related to these priorities, and to assist Chancellor's Office staff in writing project specifications, selecting contractors, and monitoring projects.
- In preparing project specifications, conduct careful research to eliminate duplication of prior projects and to ensure coordination among projects.

- Make technical assistance available to local project staff by improving state staff capabilities for monitoring and advising projects, and by requiring that all major projects establish technical advisory committees.
- Provide opportunities for staff of related special projects, and potential beneficiaries to share information about their activities and needs.
- Encourage colleges to adopt exemplary project practices and use exemplary products by endorsing these and by providing the technical assistance and funds required for their adoption.

Issue: Inadequate coordination of local projects often resulted in projects with a strictly local orientation, where project staff were uninformed about the needs of other colleges or unaware of the work of related projects that might have helped or duplicated their efforts.

Recommendations:

- Clarify the obligation of colleges that receive special project grants to develop models and products that are transferable to other community colleges.
- Require that all major projects create technical advisory committees representing colleges in the region or state. Such committees can assist project staff develop products that will be useful at other sites; members can also participate in activities such as field testing and dissemination.
- Provide project staff with information about recent and ongoing projects related to theirs. Such information should be compiled at the state level as part of the project planning process, and delivered to contractors by project monitors during initial meetings with project staff. To update the information, provide opportunities for directors of related projects to meet.

Issue: The high cost of inservice training demands a careful analysis of the cost-effectiveness of various training formats.

Recommendations:

- Investigate the factors that affect the outcomes of inservice training and identify and prescribe formats that appear to be most effective.
- Make in-depth, individualized professional development, such as that provided through peer consulting and visitations to exemplary programs, on/ongoing service that is available to faculty at all colleges on a regular basis.

Issue: Dissemination of project outcomes or products too often was not carried out in a manner that promoted their adoption and use.

Recommendations:

- Develop a review process utilizing the state-level advisory committees for evaluating project outcomes and planning appropriate dissemination procedures for products and practices that satisfy the committees' criteria.

- Publish an annual catalog of special projects and distribute it to community college educators while the information is still current.
- Strengthen the dissemination and adoption processes by arranging cooperative dissemination efforts by related projects, peer consultations and other technical assistance, visitations to exemplary programs, and other personal contacts between developers and potential users.
- Where warranted by excellence and need, provide small continuation grants to phase out project funding and enable colleges to keep model programs fully operable as demonstration programs.
- Where appropriate, award small grants to subsidize adoption of exemplary models or products by colleges that are committed to continuing their use.

Issue: Inadequate maintenance of records of project activities and outcomes, both during and after funding, led to poor long-term accountability.

Recommendations:

- Make on-site administrators who are knowledgeable about VEA legislation and accountability requirements more actively responsible for special projects awarded to community colleges.
- Provide project staff with instructions on types of data required and incentives for maintaining records after the grant terminates.
- Devise standardized reporting formats for recording information about continuing outcomes, such as student enrollments and placements, services to other beneficiaries, dissemination activities, and reported adoptions.

Issue: State-level VEA funding policies may not facilitate the most effective use of these resources.

Recommendations:

- Form a committee to review the results of this study and the parallel study of allocated Subpart 3 and 4 funds; to comparatively analyze uses of project funds versus uses of allocated funds, related management procedures, and long-term outcomes; and to recommend changes in current policies and practices. Consultants who participated in the two studies are recommended as committee members.
- Consider other funding mechanisms in addition to the current bid specification process to provide for locally-initiated special projects that address identified statewide priorities for program improvement.
- Continue to join with the State Department of Education in funding projects of mutual interest, but make certain that Chancellor's Office staff and appropriate community college administrators represent the special interests of community college education in project planning, encourage community college personnel to bid on these projects, and provide necessary technical assistance to improve their chances of bidding successfully.

II BACKGROUND AND PROCEDURES

BACKGROUND OF THE PROJECTS

In 1977-78 and 1978-79, under the Vocational Education Amendments of 1976 (Public Law 94-482), the California State Department of Education received approximately \$52 million each year in federal funds to support vocational education in the state. The federal funds were divided, as specified in the *California Five-Year State Plan for Vocational Education*, between the State Department of Education and the Chancellor's Office of the California Community Colleges. The federal vocational education (VEA) funds represented about 9% of the total expenditures for vocational education at the community college level in 1977-78 and about 7% of the total in 1978-79, with the remainder coming from state and local sources.³

The funds were used by the two agencies, as specified in the Amendments and the *State Plan*, (1) for allocations to local districts, (2) for state administration of vocational education, and (3) for special projects in vocational education. This study is concerned with the impact the third use of federal VEA funds by the Chancellor's Office has had in California community colleges.

The amounts awarded for special projects included in this study totaled approximately \$2.8 million in 1977-78 and over \$1.8 million in 1979-80, or nearly 13% of the California community colleges' share of the VEA funds in 1977-78 and approximately 9% in 1978-79. In relation to the estimated total cost of vocational education in the colleges those two years, about one cent of every dollar was used for the VEA-funded special projects.

In 1977-78, and 1978-79, special projects were funded under three different subparts of P.L. 94-482:

Subpart 2, Basic Grant: Section 120 (b)(1)(L) provides for vocational education for displaced homemakers, single heads of households lacking job skills, persons who are homemakers and part-time workers but wish to secure a full-time job, and men and women who wish to seek employment in jobs traditionally held by the opposite sex.

Subpart 3, Program Improvement and Supportive Services: Sections 131 through 136 provide for research, exemplary and innovative programs, curriculum development, vocational guidance and counseling, vocational personnel training, and grants to assist in overcoming sex bias. Also, as provided in Section 110, a portion of the funds granted under Subpart 3 are set aside to meet the special needs of disadvantaged students, limited- and non-English speaking students, and handicapped students in vocational education.

Subpart 5, Consumer and Homemaking Education: Section 150(b)(2) provides for ancillary services to ensure quality in consumer and

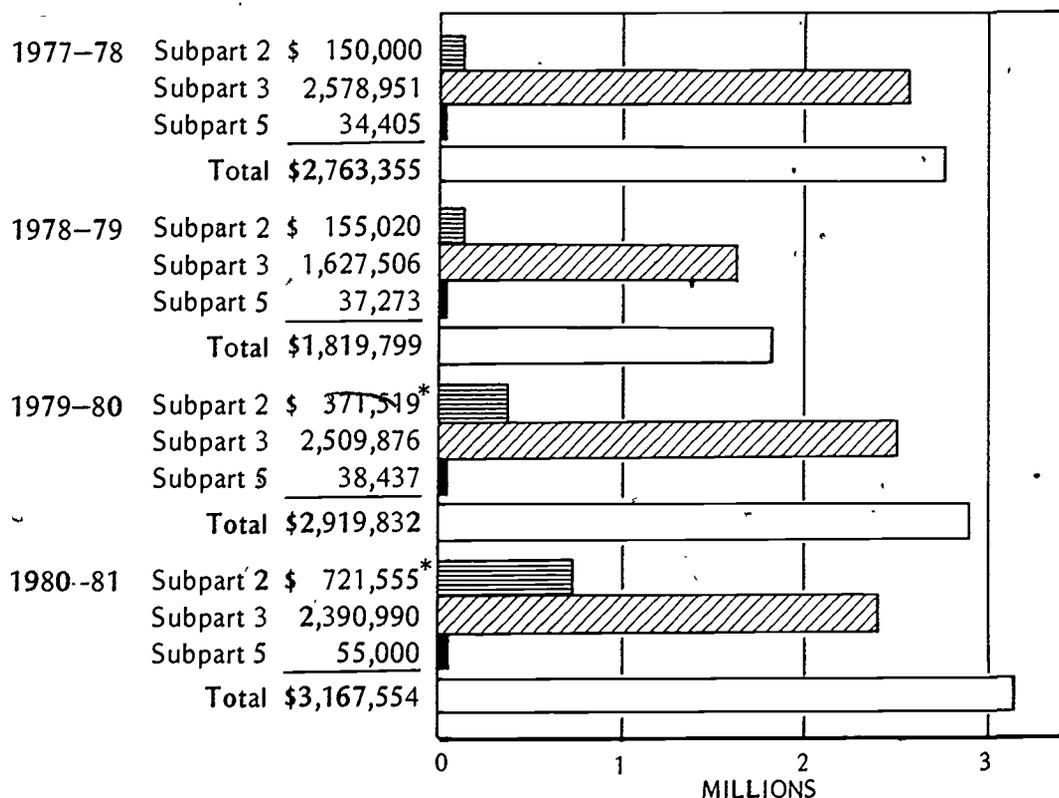
3. Based on estimates in the *California Vocational Education Accountability Reports* for 1977-78 and for 1978-79 (Sacramento: California State Department of Education, 1979 and 1980).

homemaking education programs, such as teacher training, curriculum development, research, and development of instructional materials.

Figure 1 shows the amounts of federal funds awarded by the Chancellor's Office for special projects under Subparts 2, 3, and 5 for the four-year period, 1977-1981. The years 1979-80 and 1980-81 are included to show how the decline in total expenditures from 1977-78 to 1978-79 was reversed in the following two years.

In 1977-78, the first year of special project funding under Public Law 94-482, the Chancellor's Office and the State Department of Education were concerned with establishing "an overall plan, strategies, and priorities for the combined and most effective use of available funds." While this planning was underway in November 1978, public and private agencies and institutions were invited to submit proposals for conducting activities in the areas of program improvement. Over 900 proposals were received. Applications were reviewed and ranked by a panel of 35 professionals from colleges,

Figure 1
AMOUNTS AWARDED FOR SPECIAL PROJECTS BY THE CHANCELLOR'S OFFICE
UNDER SUBPARTS 2, 3, AND 5, 1977-1981



* Includes projects funded under Section 120 (b)(1)(J), which provides for support services for women who enter programs to prepare them for employment in jobs which have been traditionally limited to men.

universities, state offices, school districts, and councils. The highest ranking proposals were funded.⁴

By 1978-79, in accordance with the completed plan, strategies, and priorities, Requests for Proposals (RFPs) were written by state staff to address priorities identified through an advisory committee process. The RFPs were sent to public and private agencies identified as prospective bidders. Proposals submitted in response were read and ranked by readers, and the projects were awarded to each agency which submitted the highest ranking proposal for each RFP.

In 1977-78 and 1978-79, a total of 142 projects were funded singly by the Chancellor's Office, or jointly by the Chancellor's Office and the State Department of Education. Their distribution to secondary, postsecondary, and other agencies is shown in Table 1. The locations of the agencies which received the project funding are shown in Figure 2. As might be expected, a large majority (nearly 85%) of the 45 projects funded singly by the Chancellor's Office went to community college districts.

Table 1
NUMBER OF PROJECTS AWARDED TO AGENCIES

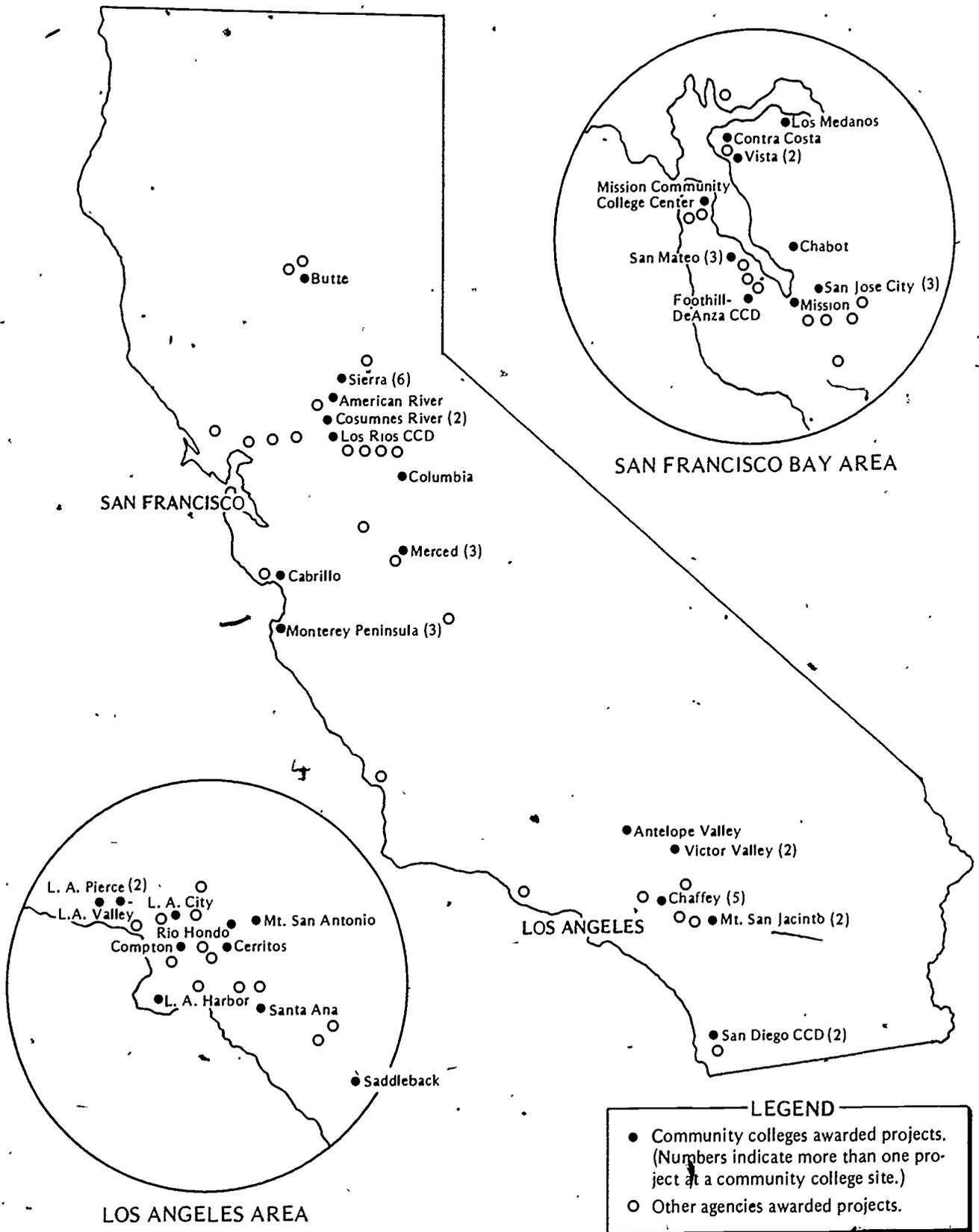
Agencies	1977-78		1978-79		Total
	Chancellor's Office	Joint	Chancellor's Office	Joint	
Secondary school districts	1	4	1	6	12
County offices	1	11	1	8	21
Community college districts	27	3	12	14	56
Universities	—	9	—	22	31
Other public agencies*	1	3	—	2	6
Private firms and agencies	2	6	—	8	16
Total	32	36	14	60	142

* Includes the Chancellor's Office, the State Department of Education (Vocational Education Unit, Personal and Career Development Services), North Orange County Regional Occupational Program, and the California Maritime Academy.

In both years studied, the State Department of Education and the Chancellor's Office combined a portion of their Subpart 3 special project funds to support joint projects that addressed mutual priorities of secondary and community college vocational education. In nearly every case, each agency provided half of the federal funds claimed by the joint projects. For example, in 1978-79, the two agencies agreed to set aside \$296,000 (\$148,300 each) for personnel training activities; these joint funds were ultimately used for seven

4. California Vocational Education Accountability Report, 1977-78 (Sacramento: California State Department of Education, 1979), pp. 9-10.

Figure 2
 LOCATION OF VEA SPECIAL PROJECTS FUNDED IN 1977-78 AND 1978-79
 BY THE CHANCELLOR'S OFFICE OF THE CALIFORNIA COMMUNITY COLLEGES



personnel training projects that served secondary and/or postsecondary educators.

As Table 2 shows, there were 36 jointly-funded projects in 1977-78 and 60 the following year. The reversal of this trend in 1979-80 and 1980-81 is probably an indirect impact of the outcomes of the earlier special projects. One reason for this reversal has been the perception by decision makers in both agencies that the joint projects were frequently not equally beneficial to both secondary and postsecondary vocational education and that, in some cases, the projects served exclusively the secondary or community college level. Since the 1978-79 funding cycle, the two funding agencies have spent a larger portion of their resources independently, for activities aimed specifically at the secondary or community college level. They have become increasingly selective about activities which they agree to fund as a combined effort. Such selectivity may have a positive impact on the outcomes of present and future joint projects.

Table 2
AGENCIES AWARDED JOINTLY-FUNDED PROJECTS

Agencies	1977-78	1978-79	1979-80	1980-81	Total
Secondary school districts	4	6	2	—	12
County offices	11	8	5	—	24
Community college districts	3	14	3	—	20
Universities	9	22	12	11	54
Other public agencies*	3	2	—	—	5
Private firms and agencies	<u>6</u>	<u>8</u>	<u>3</u>	<u>1</u>	<u>18</u>
Total	36	60	25	12	133

*See footnote, Table 1.

The 142 projects funded singly by the Chancellor's Office, or jointly by the Chancellor's Office and the State Department of Education in 1977-78 and 1978-79 were distributed among the funding categories as shown in Table 3. It should be noted that in some cases these categories were assigned inconsistently over the two-year period. For example, the Vocational Education Equity Project was categorized as a personnel training project in 1977-78 and as a gender equity project the following year. Two categories, disadvantaged and handicapped, were not used in 1977-78; however, projects were funded that year in other categories which clearly addressed the national priorities (services for handicapped, disadvantaged, and limited- and non-English speaking students). Project FIVE H (Formula for Improving Vocational Education for the Handicapped), first funded in 1977-78 as a personnel training project, was funded in 1978-79 as a project for the handicapped. These and other inconsistencies in categorizing projects make it necessary to interpret Table 3

Table 3
 DISTRIBUTION OF SPECIAL PROJECT FUNDS AWARDED BY THE
 CHANCELLOR'S OFFICE BY FUNDING CATEGORY

Funding Category	1977-78 ^a		1978-79	
	Number of Projects	Amount Awarded	Number of Projects	Amount Awarded
Subpart 2	8	\$ 150,000*	8	\$ 155,020**
Subpart 3	58	2,578,951	64	1,627,506
Research	(10)	(558,343)	(6)	(133,618)
Dissemination	(2)	(97,645)	(1)	(17,590)
Exemplary and innovative programs	(6)	(184,922)	(2)	(152,000)
Curriculum development	(10)	(338,973)	(6)	(106,685)
Guidance and counseling	(10)	(661,787)	(8)	(319,874)
Personnel Training	(17)	(640,845)	(23)	(432,410)
Gender equity	(3)	(96,436)	(6)	(169,394)
Disadvantaged	—	—	(9)	(146,726)
Handicapped	—	—	(3)	(149,209)
Subpart 5	2	34,405	2	37,273
Total Awarded	68	\$2,763,355	74	\$1,819,799
Total Claimed		\$2,574,775		\$1,669,767

* Funded in 1978-79 with monies carried over from 1977-78.

** Included are \$25,000 of 1979-80 monies awarded to one project when funding was delayed.

with caution, as the figures there can be misleading in light of actual uses for which the funds were awarded.

PROCEDURES USED IN THE STUDY

This study of the impact of the vocational education special projects in California community colleges was undertaken in November 1981 at the request of the Board of Governors of the California Community Colleges. The primary objective of the study was to identify and describe program improvements brought about by changes or modifications in college policies, administrative practices, and/or instructional programs resulting from the special projects. The study also focused on changes in student outcomes, including those resulting from project efforts to promote sex equity and to improve programs and services for students with special needs.

Several key questions related to this objective were identified early in the study:

- After the funding terminated, what happened in respect to programs, activities, products, and services initiated during the projects?

- Was there any additional dissemination of project products or other outcomes, or evidence that other colleges had adopted model programs or were using project products?
- How did factors such as joint funding, dissemination efforts, the format of inservice activities, and continuity in staffing affect the long-term impact of the projects?
- Was there a difference in cost-effectiveness of certain projects, measured in terms of immediate and long-term outcomes?

The impact study was a follow-up investigation to determine what occurred as a result of the projects. It was not an evaluation of how the projects were conducted or whether the objectives proposed for each were met. For each project, research was focused on the period after the VEA funding expired.

It was expected that the results of this study, combined with data from a parallel study of the uses of VEA funds allocated for program improvement,⁵ might provide information useful for evaluating policies and practices related to the overall distribution of VEA funds.

The first step in conducting the research was to develop a list of the projects to be studied. After reviewing project reports and, where necessary, consulting project personnel or funding agency staff, 116 distinct projects were identified as the study population. This number was reached by considering continuing projects funded for both years and follow-on projects bearing a close relationship as single projects, rather than as two or more separate projects. For example, information was collected on the fire science curriculum development projects funded in 1977-78 and 1978-79 as for a single project.

Of the 116 projects, 14 jointly-funded projects were identified which pertained only to secondary education and, therefore, had no impact on community college education. (It should be noted that at least nine jointly-funded projects were identified which pertained only to community college education.) No further information was gathered for the 14 secondary projects; follow-up data were collected for 102 special projects.

Three major strategies were used to obtain follow-up information:

1. Beginning early in 1982, 110 former project directors or other persons who were knowledgeable about the projects were interviewed in person or on the telephone to learn what had occurred after each project ended and/or to obtain the names of project beneficiaries who could be contacted for additional or corroborative information.
2. In the spring of 1982, a sample of 20 project sites were visited. Each visit was conducted by the study director and one of six consultants recommended by the Chancellor's Office. The consultants, who also served as an advisory committee for the study,

4. "Evaluation of the Uses of Allocated Subpart 3 and 4 Funds," a study conducted for the State Department of Education and the Chancellor's Office by Education Evaluation and Research, Inc., Department of Education contract number 0039.

were all former community college administrators of vocational education or student services. At each site, former project staff and others involved in the project or its continuation were interviewed. When it could be arranged, interviews were also conducted with individuals on campus who were identified as beneficiaries of other projects. A total of 168 follow-up reports were obtained in this way.

Similar consultant-assisted site visits had been made to five additional sites a few months earlier as part of previous research by the study director to evaluate continuation projects. In 1979-80, the study director had visited 11 other project sites, attended meetings and programs conducted by ten projects, and interviewed managers of all 1979-80 projects in person near the end of their projects. These previous experiences provided additional background information for this study.

3. In May 1982, 462 inquiries were mailed to inservice participants and other beneficiaries of 17 projects. Names were obtained from project reports or rosters supplied by former project managers. For 13 projects which served relatively small numbers of community college educators, inquiries were sent to every beneficiary identified or to one beneficiary at every college represented. For projects that served larger numbers, inquiries were sent to a 10% or larger sample of participants.

In each case the specific activity or product in question was identified. The individual was asked to describe how participation in the activity or use of the product had directly or indirectly affected instructional programs, student services, vocational education enrollments, student completions and placements, institutional policy and management practices, and/or qualifications of staff at his or her college. A total of 223 written or telephoned responses (48%) were received and are summarized in the appropriate sections later in this report.

In 35 cases where projects were refunded after 1979, follow-up information was also obtained from their proposals and reports. Annual reports which had been prepared for a few other projects continued with local funds were also examined. For most of the projects, however, the only sources of information were the oral reports of former managers, beneficiaries, and state staff who described their perceptions of the impact of the projects.⁶ As might be expected, project outcomes and records often had been merged with other activities and information as time passed. Consequently, specific results frequently could not be attributed solely to the special projects.

The data collected were analyzed with the assistance of the consultant team and used to prepare this report. For purpose of analysis

6. The individuals who provided information are identified in Appendix B.

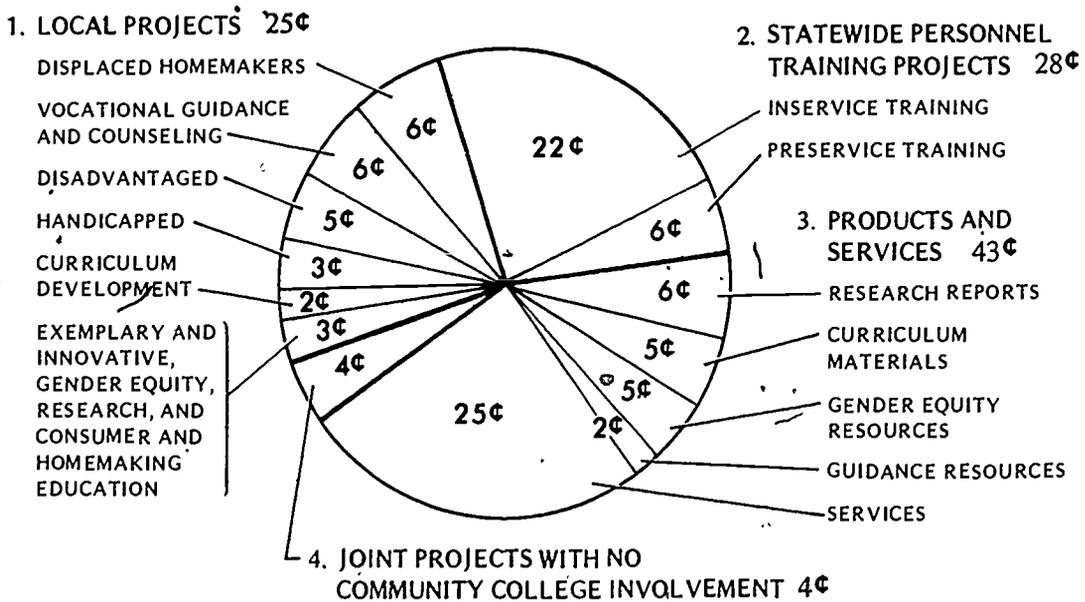
and reporting, the 102 projects were grouped according to their outcomes and impact into three major categories:

- *Local projects*, which provided services or programs on a single campus or on a limited number of neighboring campuses and which had impact, for the most part, in that localized area.
- Projects which provided *personnel training* activities, including preservice education, inservice education, and consulting services, on a regional or statewide basis.
- Projects which made *products or services* available for use by community colleges statewide.

The distribution of projects within these categories and their cost to the Chancellor's Office are shown in Figure 3. Approximately 43 cents of every special project dollar went for projects that resulted in products or services for statewide use; 28 cents supported personnel training activities; and 25 cents was claimed by the local projects. Within these categories, the largest expenditures were for a variety of statewide services and for inservice training.

The nature of the projects in each category is described in more detail in the following sections, and findings about their impact are summarized and discussed. Examples are included of individual projects in each section; Appendix A contains a summary of the information obtained about the impact of each of the 102 projects.

Figure 3
DISTRIBUTION OF PROJECTS AND AMOUNTS CLAIMED, 1977-78 AND 1978-79



Project Type and Focus	Cost to the Chancellor's Office	Number of Projects
1. Local Projects	\$1,077,927	34
Displaced homemakers	(277,607)	(9)
Vocational guidance and counseling	(233,676)	(5)
Disadvantaged	(199,659)	(6)
Handicapped	(142,976)	(3)
Curriculum development	(82,516)	(4)
Exemplary and innovative programs	(49,602)	(2)
Gender equity	(48,248)	(2)
Local research	(28,688)	(2)
Consumer and homemaking education	(14,955)	(1)
2. Statewide Personnel Training Projects	1,171,481	29
Inservice training	(943,907)	(22)
Preservice training	(227,574)	(7)
3. Products and Services (Statewide)	1,805,934	39
Research reports	(243,785)	(9)
Curriculum materials	(215,286)	(9)
Gender equity resources	(195,590)	(9)
Guidance resources	(68,030)	(3)
Services	(1,083,243)	(9)
4. Joint Projects With No Community College Involvement	189,200	14
Total	\$4,244,542	116

III LOCAL PROJECTS

Over \$1 million of the Chancellor's Office special project funds were claimed by 34 projects that were operated on a single campus or on a few neighboring campuses and that had impact primarily in these localized areas. Included were the nine Subpart 2 projects for displaced homemakers, 24 of the Subpart 3 projects, and one Subpart 5 project.

SUBPART 2 PROJECTS

Nature of the Projects

The nine Subpart 2 projects served persons who met the definition of displaced homemaker that appears in Section 120 of P. L. 94-482 (see page 8). Typically, the programs included a recruitment component, counseling, and instruction in job seeking skills. Career planning activities and workshops or special classes on topics such as assertiveness and career decision making were also offered by most of the projects. Instruction in basic skills was usually available to participants as a project component or through referral to existing programs. The projects sought to place participants in vocational programs or employment; most provided counseling, tutoring, and/or peer support groups to increase class retention and job survival.

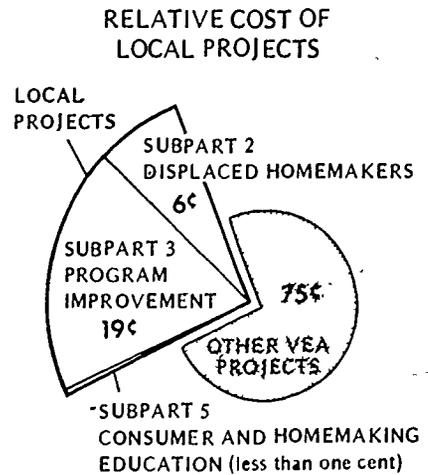
Sources of Follow-Up Information

Operational managers of seven of the nine projects were interviewed in person (4) or on the telephone (3). Managers of two projects that were discontinued when the special funding ended could not be reached, and information about these projects was obtained from secondary sources. Visits were made to two project sites. While written reports were not on file for any of the 1977-78 or 1978-79 Subpart 2 projects, six of the projects were funded again in 1979-80; reports obtained for these projects provided information about how activities were continued through that funding period.

Unfortunately, the nature of the data available about the Subpart 2 projects varied from project to project so that, in some cases, only a general picture of the project's outcomes could be formed. Respondents cautioned that changes in enrollments and retention, attitudes of instructors, administrative policies, instructional programs, student services, and other factors, where these were reported, could not always be attributed solely to displaced homemaker project activities.

What Was Learned About the Projects

A total of over 4,000 women were reported to have been served by the six continuing projects in 1979-80, including 485 who enrolled in project-sponsored classes. Three sites continued to receive



VEA project funds from the Chancellor's Office in 1980-81. When this funding expired, they were able to maintain programs and services in 1981-82 with VEA funds allocated for displaced homemakers and gender equity, as well as funding from other sources (e.g., EOPS and CETA).

The six discontinued projects were terminated when the funding ended. Although at least four of these projects were successful in meeting their objectives, the special services provided apparently were not considered to be of sufficiently high priority to warrant continuation with local funds.

In the interviews with project representatives and in some of the written reports, case histories of project beneficiaries clearly demonstrated how the lives of individual women had been positively and dramatically affected by their participation, through improved self-confidence and employability.

In 1981-82, rather than funding a limited number of special projects for displaced homemakers, the Chancellor's Office elected to set aside 1% of the Basic Grant allocation to each college for the purpose of providing services to this population. The amounts available to districts ranged from \$190 to \$28,249; the average, \$2,783, was considerably less than the average amount for the special project grants, \$19,064. Based on the results of the 1977-78 and 1978-79 projects and other displaced homemaker projects funded for the first time in 1979-80, there is little doubt that colleges which retained project staff and continued the project services were able to make more effective use of their allocated Subpart 2 funds for displaced homemakers as a result of the foundation of experience and contacts they had built with the special project grants.

Unlike the disadvantaged and handicapped populations which were identified as special needs groups in the Vocational Education Amendments of 1968, displaced homemakers were recognized in the VEA legislation for the first time in 1976. The nine projects included in this study were the first special efforts funded by the Chancellor's Office to assist this group. The relatively low survival rate of these

EXAMPLES OF SUBPART 2 LOCAL PROJECTS

- Project staff continued to provide counseling and referral services and scheduled 41 workshops in job hunting skills as a part of home economics, business, and adult education classes. Personal development classes initiated under the special project funding have been added to the adult school offerings.
- Through innovative use of resources and volunteer help, one project continued to serve 500-600 women each year and to enroll 150 new women each semester in a 12-unit re-entry program. Subpart 2 displaced homemaker allocated funds, Subpart 3 gender equity funds, and EOPS funds were used.

projects may be due, in part, to lack of experience in serving this special population. The limited resources available to sustain the special services, combined with the fact that many colleges have not recently tried to increase enrollments, also appear to have influenced decisions not to continue the projects, even though there are now over 500,000 displaced homemakers in California who might benefit from the services.

SUBPART 3 AND 5 PROJECTS

The Nature of the Projects

Over \$800,000 were claimed by 24 Subpart 3 projects and one Subpart 5 project that were primarily local in nature. As shown in Table 4, the Subpart 3 projects addressed nearly every legislated category. The Subpart 5 project was in the area of curriculum development for parenthood education. Less than half the projects were funded jointly. Twenty-one were based on a community college campus; four others were conducted by county offices of education.

Table 4
DISTRIBUTION OF SUBPART 3 AND 5 LOCAL PROJECTS

Type	Total Number of Projects	Number of Joint Projects	Cost to the Chancellor's Office
Subpart 3	24	12	\$785,365
Vocational guidance and counseling	(5)	(3)	(233,676)
Disadvantaged	(6)	(3)	(199,659)
Handicapped	(3)	(—)	(142,976)
Curriculum development	(4)	(2)	(82,516)
Exemplary and innovative programs	(2)	(1)	(49,602)
Gender equity	(2)	(2)	(48,248)
Local research	(2)	(1)	(28,688)
Subpart 5	1	—	14,955
Total	25	12	\$800,320

Sources of Follow-Up Information

Former or active operational managers of 22 of the 25 projects in this group provided information in telephone interviews. Site visits were made to 16 of the projects. During the visits, others involved in the projects or their outcomes were also questioned; a total of nearly 100 people at the sites gave the study teams their views about the outcomes and impact of the projects.

Personnel interviews provided descriptive, anecdotal data which were validated by observations on the site visits. Documented statistical evidence of ongoing impact was obtained for only 11 of the 25

projects, including five that were required to prepare project reports for continuation projects in 1979-80. In many cases, statistics about services rendered or uses of materials produced were no longer recorded and reported. Records such as enrollment and placement statistics were kept occasionally as part of other required record keeping, but were no longer reported separately for programs or services initiated with the project funds.

What Was Learned About the Projects

Of the 25 Subpart 3 and 5 projects classified as local projects, only 20% were no longer operating when project representatives were contacted around the beginning of 1982. The remaining projects (80%) had either expanded, continued, or slightly reduced the activities begun under VEA project funding. The status of the 25 projects is shown in Table 5 below.

Table 5
STATUS OF SUBPART 3 AND 5 LOCAL PROJECTS

Status	Number of Projects	Cost to the Chancellor's Office
Expanded activities	8	\$243,121
Continued at the same level	6	111,759
Continued at a reduced level	6	210,474
Discontinued activities	5	234,966
Total	25	\$800,320

Because of the unique character of each project, there were no universal reasons why they had been continued or terminated after the project funding expired. In some cases, practices, programs, or services had been institutionalized or expanded to other populations or program areas after success was demonstrated during the initial funding period. Activities of other projects were used as evidence to obtain additional funds that were then used to refine or expand the original outcomes. And, after two of the local projects officially ended, their continuation took a new form, as research information or training from the project was put to use.

It was clear that the lasting impact of the local projects at the home institutions was affected by the availability of funds and staff to continue work begun with the project grants, and by local needs for the services or programs. There was also evidence that local projects attached to a single college or district were more likely to continue than those that were not college-based but provided services to a college or colleges. Of the five local projects in this group that were no longer operating at the time the follow-up contact was made, three were projects that operated out of county offices of education and one was a regional placement project serving several community

colleges. Only one of the five was identified with a single college campus.

Loss of project staff was also a factor in the termination of the activities of several projects. In four of the five cases where activities were discontinued, the project managers left the institution soon after VEA funding terminated. Although these projects were not continued, in at least three cases there was evidence that individuals involved benefited from the experience and would make use of what they had learned to solve similar problems in the future.

—EXAMPLES OF SUBPART 3 LOCAL PROJECTS—

- A successful VEA project to improve recruitment and retention of disadvantaged students was expanded with local funds to serve other populations; in 1980-81, counseling, workshops, and related services were provided for 6,000 adult re-entry students, 859 displaced homemakers, 2,672 nontraditional students, and 625 senior citizens. The program also provided instructional support for 3,020 academically disadvantaged students. Project staffing had grown to six full-time and 20 part-time positions, and the program is now considered an integral part of campus services.
- An electronics curriculum development project which received \$22,500 in VEA funds was said to be instrumental in obtaining a \$2.4 million CWETA (California Worksite Education and Training Act) grant to train entry-level electronics workers and to upgrade the skills of experienced workers.
- San Francisco Bay Area tradeswomen trained as occupational teachers with the support of a VEA gender equity project continue to find teaching positions in local community colleges; in 1981-82, at least ten were employed teaching welding, auto technology, carpentry, machine technology, woodworking, ornamental horticulture, electrical trades, and industrial maintenance. Administrators contacted agreed that these instructors encouraged women to enroll in and complete nontraditional classes. The original project served as a model for a 1980-81 Subpart 2 project in Southern California in which 16 tradeswomen completed credentialing requirements.
- Representatives of three projects blamed funding reductions for inability to sustain the same level of effort as during the grant. However, a technical language center was still in operation 20 hours a week at one college, and 5,000 student contacts were reported in 1980-81. At another site, efforts to achieve gender equity in four targeted programs were being continued with some positive results. At the third college, guidance services for evening students had been reduced, but were still continued on a limited basis with "boot-legged" time.

Discussion of the Findings

From these examples of the long-range outcomes of this group of special projects, it is clear that their impact on local campuses varied greatly in nature and amount. Even where the project activities had been terminated, there was usually some lasting change that had occurred in the individuals or institutions involved. Thus, to some degree in nearly every case, the grants did act as "seed" money for the recipients.

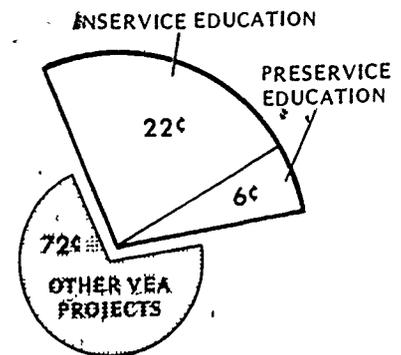
Although the projects cited above have been characterized as "local," most of them clearly resulted in techniques for delivering programs or services that were applicable on other campuses. Project staff had accumulated experiences that made them useful as resource people to others addressing similar problems. It appeared, however, that the impact of these projects rarely extended beyond the home campus.

Reports and/or products were distributed statewide by at least eight of the 24 Subpart 3 projects; however, staff from only three projects demonstrated the programs or practices they had developed in workshops attended by interested administrators or faculty. About half of the Subpart 3 project sites had been visited by individuals interested in learning more about them. The Subpart 2 displaced homemaker project personnel shared information about project activities with gender equity project personnel at conferences sponsored by the Chancellor's Office. This kind of information sharing among project managers about other related VEA projects has not taken place routinely in other funding categories.

IV STATEWIDE PERSONNEL TRAINING PROJECTS

At a cost to the Chancellor's Office of over \$1 million, 29 personnel training projects supported preservice training of vocational instructors or counselors, or presented a variety of inservice training activities for practicing vocational educators, counselors, and other concerned personnel statewide. Except for one Subpart 5 inservice training project, these activities were all funded under Subpart 3. The training activities took place between July 1977 and July 1980.

RELATIVE COST OF STATEWIDE PERSONNEL TRAINING PROJECTS



PRESERVICE EDUCATION PROJECTS

The Nature of the Projects

Seven of the 29 personnel training projects provided training for teacher and counselor educators or individuals who were in the process of qualifying for vocational teaching credentials. As shown in Table 6, six of the seven projects were funded jointly by the Chancellor's Office and the State Department of Education. The projects supported training of new teachers of vocational agriculture and business education enrolled in regular university teacher education programs; subsidized teacher education programs that provided training required for the Designated Subjects Credential; and resulted in conferences or workshops for trainers of home economics teachers, industrial education teachers, and counseling personnel.

Table 6
DISTRIBUTION OF PRESERVICE EDUCATION PROJECTS

Type	Total Number of Projects	Number of Joint Projects	Cost to the Chancellor's Office
Training for new business and agriculture teachers	2	2	\$107,224
Designated Subjects Credential programs	2	1	90,046
Training for teacher or counselor-educators	3	3	30,304
Total	7	6	\$227,574

Sources of Follow-Up Information

Operational managers of the seven projects were interviewed by telephone or in person. Site visits were made to four of the projects. Available reports of the projects and related follow-on projects were reviewed. When possible, lists were obtained of conference and workshop participants; letters were mailed to a sample of these individuals requesting information about outcomes of their participation. During site visits to other projects in the study, interviewees were asked

about their experiences related to personnel training activities supported by the Chancellor's Office with special project funds.

What Was Learned About the Projects

Four of the seven projects have continued to receive VEA funding. In addition to the industrial and business education programs described on the next page, the agriculture teacher training institutions continue to receive subsidies each year for their student teaching programs, which graduate a total of around 75 agriculture teachers each year. The Division of Vocational Education, University of California Extension, also receives funds to support training required for the Designated Subjects Credential. In the three-year period, 1978-1981, nearly 4,000 community college faculty enrolled in methods classes presented statewide through this extension program. Both the agriculture preservice and the credentialing programs were strongly endorsed by former participants and their administrators who were contacted during site visits.

The three remaining projects were discontinued when VEA funding ended. At that time, it was expected that one of these, the Competency-Based Teacher Education Program, might be maintained through U.C. Extension, but this no longer appears likely. Unless another sponsor is found, there is no assurance that the option to obtain a part-time credential through self-instruction will be available much longer.

A purpose of the research into the outcomes of preservice projects as well as the jointly-funded inservice projects described later in this section, was to learn something about the role university-based projects have in the training of community college vocational teachers. Consequently, home economics, industrial, business, and agricultural education teacher educators were asked to provide information about the placement of teachers they train.

Responses were received from home economics teacher educators at six universities and from industrial education teacher educators at seven universities, all of whom indicated that only a small percentage (10% or less) of the teachers they trained in 1981-82 went directly into community college teaching. They also estimated that 15% or less went into community college teaching after teaching first in high school programs, or gaining other experience in the field, or earning a higher degree. This estimate seems low, and if accurate, would indicate that Chancellor's Office funds are misspent on preservice training projects.

In fact, a high percentage of community college instructors do have previous high school teaching experience, as evidenced by data from a California State University, Fresno study and estimates from an agriculture teacher educator. Of the 47 community college business education teachers who responded to the Fresno survey, 72% had an average of 6.7 years of teaching experience at the high school level. General secondary credentials were held by 54% of the respondents and community college credentials by 49%.⁷ In addition, the

7. Dwayne Schramm and Thomas Rieger, *A Study of Inservice Business Education at the Community College Level*, California State University, Fresno, January 1982.

EXAMPLES OF PRESERVICE TRAINING PROJECTS

Two statewide conferences were held for industrial education teacher educators to share program information and curriculum materials. Seven participants, in response to an inquiry about the importance of the conferences, agreed that they were very important for improving coordination, sharing ideas and information, and discussing common problems and solutions. In 1980-1983, similar conferences for industrial education teacher educators are being conducted as part of a comprehensive preservice and inservice project funded jointly by the Chancellor's Office and the State Department of Education.

A project at a Southern California university to develop the core curriculum for a competency-based program to train teachers of office and distributive education has been continued. Instructional modules for specialized methods courses have been developed and a Center for Business Education established which provides preservice and inservice training. Beginning in 1980, Subpart 3 funds supported the adoption of this model program at two other universities located in the central and coastal regions of the state. Developers of the program believe that the modularized, competency-based format has led to greater use of this particular instructional approach by program graduates, since "teachers teach as they were taught."

The Competency-Based Teacher Education (CBTE) program is a modularized teaching methods course in which the students use workbooks and sound-filmstrips for self-instruction in the competencies required for part-time teaching credentials. The program was developed at a Southern California community college, where it was based until the fall of 1980, when project staff elected to discontinue their management of the program. During the three previous semesters, 155 students completed CBTE courses taught on 11 community college campuses throughout California by instructors trained by the CBTE project. The materials can still be purchased from the community college; however, training is no longer available for new CBTE instructors. U. C. Extension has agreed to certify teachers who complete CBTE training on campuses that continue to offer it, but U.C. Extension does not have resources to maintain the audiovisual materials required to offer the program as an alternative to their "Techniques of Teaching" course.

head of the largest agriculture teacher education program in California estimates that at least 55% of the current community college agriculture teachers have had high school teaching experiences and are graduates of one of the five teacher training programs subsidized with VEA funds. And finally, three-fourths of the agriculture teachers hired in 1981 by community colleges came from high school teaching positions.

Thus it appears that, while community college vocational instructors seldom come directly from the teacher training institutions, a

majority of community college business and agriculture teachers have participated in preservice teacher education programs such as those subsidized with special project funds from the Chancellor's Office and the State Department of Education.

INSERVICE EDUCATION PROJECTS

Nature of the Projects

Twenty-two of the personnel training projects resulted in workshops, conferences, consultations, visitations, or other professional development activities for community college practitioners. These projects covered a wide range of topics, from specific subject-matter areas to services for special student populations. All were Subpart 3 projects, with the exception of one Subpart 5 project. The distribution of the 22 projects is shown in the table below.

Table 7
DISTRIBUTION OF INSERVICE EDUCATION PROJECTS

Type	Total Number of Projects	Number of Joint Projects	Cost to the Chancellor's Office
Gender equity and special student populations	4	3	\$362,699
Subject-matter areas	9	8	235,043
Teaching and counseling techniques	2	1	149,902
Individualized activities	2	—	60,667
Management	2	1	41,468
Work experience education and CETA	2	2	23,088
Miscellaneous topics	1	1	71,040
Total	22	16	\$943,907

Over 2,600 community college educators participated in these inservice training activities. Participation in individual projects ranged from five instructors who attended workshops given by an industrial education inservice project, to approximately 1,000 educators who participated in training activities of the Vocational Education Equity Project, which was funded for both years studied. As shown in Table 8, the average cost to the Chancellor's Office per community college participant was about \$326 in special project funds; the cost was slightly higher for the jointly funded projects than for the projects funded by the Chancellor's Office alone. In considering the participation and cost figures, the point made earlier about the high school teaching background of many community college vocational instructors should be kept in mind. Colleges do benefit indirectly from the skill updating of secondary vocational educators who later join their faculties.

Table 8
PARTICIPATION IN 20 INSERVICE EDUCATION PROJECTS, 1977-1979

Funding Source	Number of Projects	Total Number of Participants	Number of Community College Participants*	Cost to the Chancellor's Office	Cost Per Community College Participant
Joint	16	13,772	2,056	\$675,363	\$328
Chancellor's Office	4	566	558	177,616	318
Total	20**	14,338	2,614	\$852,979	\$326

* Estimated numbers based on actual figures reported by projects and, where this information was missing, on extrapolation based on related data.

** Data for two projects were not available to make an extrapolation.

Sources of Follow-Up Information

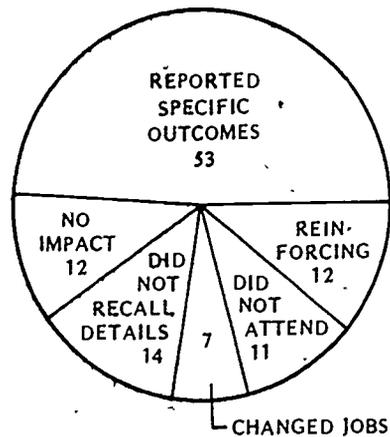
Rosters were obtained for 15 of the joint projects and two of the projects funded singly by the Chancellor's Office. Only two of the available rosters were from projects funded in 1977-78, the first year studied. Based on responses to inquiries about outcomes of participation in specific inservice activities, it was apparent that recollections of workshops attended more than two to three years ago were sketchy at best, and may be unreliable. Therefore, the lack of rosters for 1977-78 was not considered detrimental to the study.

In May 1982, follow-up inquiries were sent to 225 community college educators listed on the inservice project rosters. In each case, the specific workshops attended by the individuals were identified by topics, dates, locations, and sponsoring agencies. The letters requested descriptions of how the individuals had made use of information obtained in the workshops: that is, how the workshops had directly or indirectly affected instructional programs, student services, enrollments in vocational education programs, completions and placements, institutional policy and management practices, and/or qualifications of staff at the individuals' colleges. Written or telephone responses were requested by June 15, 1982. Similar information was sought from participants identified on the rosters who were contacted during site visits.

What Was Learned About the Projects

By July 1, 1982, 93 responses (41%) were received. These replies, plus responses from 16 other individuals contacted during site visits, are shown on the next page. Eleven who replied said they did not recall attending the workshop in question. In some cases, the rosters obtained may have been compiled from registration lists rather than attendance lists. In other cases, it was possible that respondents did not remember or recognize the activity cited because of the length of time since the workshop and the number of intervening meetings and other activities. Seven respondents who had changed jobs said they were no longer in a position to use the information obtained and

RESPONSES OF FORMER INSERVICE PARTICIPANTS



were not aware of the present status of their previous activities. Fourteen remembered attending the workshops but could not recall specific details or outcomes.

Of those who replied, 77 (71%) recalled the activity and were able to describe how it affected them and/or their work. Twelve of these respondents stated that the activity had little or no impact on them or their college programs. The most common reasons given were that the workshop content was not applicable at the community-college level or that it was information that they already knew.

Positive outcomes were reported by 65 respondents (60%). Of these, 53 described specific actions taken as a result of their participation.

These included using information to plan or revise programs, improve program evaluation, provide inservice training for colleagues, and improve services for students with special needs. Other respondents described more personal or general outcomes, such as the reinforcement or revitalization they derived from peer contact and discussion of common concerns among participants from different colleges.

The positive responses were not evenly distributed among the 13 inservice projects included in the survey. Judging from the replies received, certain projects stimulated more positive outcomes than others. Four of the five projects with the highest percentage of specific positive responses were community college-based; the fifth was a university-based project. Of these five, the project with the highest percentage of specific outcome responses was funded only by the Chancellor's Office. The remaining four projects were funded jointly; three of these served a significant number of secondary educators as well. Only one of the five projects presented one-day workshops. The others used less common formats, including extended (up to one week) visits to other colleges and/or programs, and two- and three-day workshops. All five projects provided skill upgrading in specialized areas. Of the five inservice projects which appeared to have had the least impact, none were community college-based and all were funded jointly.

The gender equity projects in this inservice category were cited as a particularly good example of how related projects cooperated to accomplish common goals. Through 1982, the Chancellor's Office has spent \$473,572 in VEA project funds to support the inservice activities of VEEP (Vocational Education Equity Project) and the technical assistance provided to colleges through CC-PAGE (Community Colleges Plan to Achieve Gender Equity). Only the VEEP project was included in this study, but information was collected about CC-PAGE as well, because of its close relationship to VEEP and to gender equity products discussed in the following section.

Community college personnel who gave their opinions about the projects and about overall efforts to address gender equity generally

EXAMPLES OF INSERVICE EDUCATION PROJECTS

Since 1978, the PROP (Planning for Renewal in Occupational Programs) project has provided a brokering service which arranges visits of community college vocational faculty and administrators to exemplary programs on other campuses. All of the PROP visitors interviewed cited ways they had used information obtained during visits to accomplish a range of specific objectives, from designing a new auto shop facility to planning for a non-campus college. All participants agreed that this individualized format was more productive than workshops or conferences.

Three-day workshops in vocational guidance for the handicapped were presented in three locations in Southern California in May 1980. Respondents said the workshops helped them understand and respond to the needs of handicapped students; that they had incorporated strategies and materials discussed at the workshops into their programs; and that they had shared the information with other counselors.

In 1979-80, health occupations instructors from community colleges statewide interviewed recent graduates of their programs and their employers and prepared reports on their findings. Participating instructors said they had used the information to justify new equipment purchases, modify or add program components to meet identified needs, and to develop reports for accreditation and COPES reviews.

In the spring of 1980, one-day workshops in time management and program evaluation were presented statewide for vocational education administrators; a two-day workshop on needs assessment, planning, evaluation, and management effectiveness was also conducted. Participants reported using information obtained in these sessions to improve scheduling and other management practices, and to conduct more meaningful evaluations and use the results more effectively. Two participants had arranged a similar two-day workshop for representatives of 11 colleges in their region.

A two-day fashion merchandising workshop which included a tour of the California Fashion Mart was conducted in November 1979 at a cost to the Chancellor's Office of less than \$25 per participant. This workshop, which drew home economics educators from throughout the state, was commended by several respondents as one of the best they had attended. Specific outcomes described included starting new programs, making contacts with industry, incorporating information from the workshop into course content, and using what was learned in making administrative decisions about programs.

felt that awareness of the issue was no longer a problem on their campuses and that vocational faculties, with a few exceptions, welcomed nontraditional students into their classes. Most contended that imbalanced enrollments continued to exist because men or women did not chose to enter certain programs.

In a search for further evidence of the overall impact of the gender equity projects and of local efforts which were promoted by them, college self-evaluation data collected by COPEs (College Occupational Program Evaluation System) from each college in 1979 through 1982 were obtained and reviewed. Ratings of effectiveness for selected gender equity items are shown in Table 9.

Table 9
RESPONSES TO SELECTED COPEs GENDER EQUITY ITEMS, 1979-1982

COPEs Self-Examination Items	Percentage of "Good" or "Excellent" Responses			
	1979	1980	1981	1982
College policy to achieve sex equity.	58%	56%	74%	67%
Provision of inservice to train faculty and counselors to recognize and overcome sex bias and discrimination.	21	28	45	46
Provision for program coordination and staffing.	23	35	44	47
Recruitment and enrollment of students in non-traditional programs for their sex.	25	33	37	39
Placement of students in nontraditional work experience or clinical experience.	35	29	22	23
Placement of students in occupations nontraditional to their sex.	23	26	22	19

The COPEs data show a trend for community college personnel who complete the self-evaluations to report increased opportunities for inservice for faculty and counselors. The provision of on-campus inservice training, as described in the second COPEs item, was a major objective of VEEP. Steady increases have been reported also in program coordination and staffing, as well as recruitment and enrollment of students in nontraditional programs. However, the degree to which these changes can be attributed to the training and other assistance provided by the gender equity projects is unknown. Given this increase in awareness, programs, staff, and enrollments, the decline in placement of students in nontraditional work experiences and occupations is perplexing, and may indicate poor retention of non-traditional students or resistance in the world of work to meeting gender equity goals.

Discussion of Findings

Evaluation of the impact of inservice activities based only on long-term recollections may not accurately reflect the importance of these activities. The data reported here can only be used to suggest

the range of effectiveness and some of the key elements which might increase effectiveness.

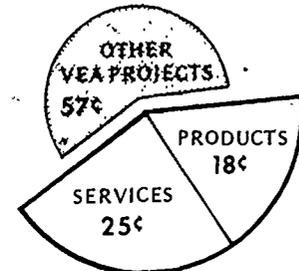
A significant number of the respondents, including some of those who specified actions taken as a result of participation in inservice training activities, remarked that they benefited from getting off campus, exchanging ideas with colleagues, and learning that their operations were "on-track." This observation came most frequently from home economics educators who participated in consumer and homemaking education conferences.

Certainly inservice education is an area which deserves more systematic study, considering the high dollar cost per participant and, in many cases, the seemingly elusive outcomes. The elements of successful projects, such as those described here as having produced identifiable outcomes, should be studied and incorporated into future personnel training projects. For example, how does the format of the inservice activity affect retention and use of the information provided? What effect does the requirement to prepare a written report, or to share the information obtained, have on retention and use of the information? Should priority be given to inservice activities that address specialized subjects in depth? And how can the potential variety and economy of jointly-funded inservice projects be realized without sacrificing appropriateness of content for community college or secondary participants?

V PROJECTS RESULTING IN PRODUCTS OR SERVICES

Over \$1.8 million of special project funds were claimed by 39 projects that had, as their major outcomes, a report, product, or service that was made available to community colleges throughout California. With the exception of one Subpart 5 project, these projects were funded under Subpart 3.

RELATIVE COST OF PROJECTS RESULTING IN PRODUCTS OR SERVICES



PROJECTS RESULTING IN PRODUCTS

Nature of the Projects

Thirty special projects resulted in the production of research reports, curriculum guides or other curriculum materials, resource materials for the promotion of gender equity, or vocational guidance and counseling materials. Only four projects were funded by the Chancellor's Office alone; all other projects in this group were funded jointly.

Table 10
DISTRIBUTION OF PROJECTS RESULTING IN PRODUCTS

Type of Product	Total Number of Projects	Number of Joint Projects	Cost to the Chancellor's Office
Research reports	9	8	\$243,785
Curriculum materials	9	6	215,286
Gender equity resources	9	9	195,590
Vocational guidance and counseling materials	3	3	68,030
Total	30	26	\$722,691

Sources of Follow-Up Information

Operational managers of 15 of the 30 projects were contacted; for the remaining projects, the primary sources of follow-up data were state staff who were most likely to know how products delivered to the funding agencies were later distributed. Questions about use of some of the curriculum materials were mailed to potential users. During the site visits, appropriate individuals were questioned about use of the materials. To obtain follow-up information on the gender equity resource materials, a survey instrument was sent to the directors of ongoing special projects concerned with gender equity at 15 community colleges and to the Chancellor's Office gender equity specialist.

What Was Learned About the Projects

The projects that produced products were grouped into four categories according to their type of content: research, curriculum,

gender equity, and guidance and counseling. Significant findings for each category are summarized in the following paragraphs.

Research

About six cents of each special project dollar spent by the Chancellor's Office in 1977-1979 was used to fund nine research projects. Evidence was found that research results of five of the projects

EXAMPLES OF PROJECTS RESULTING IN PRODUCTS

- Apprenticeship program sponsors, program sponsor coordinators, and school representatives at 53 community colleges, 29 adult schools, and ten ROCs were surveyed in 1979 to learn about services provided by these agencies to apprenticeship training programs, including information about instructional materials used, facilities, policies, and agreements. The resulting report has been presented and discussed at meetings of state and local apprenticeship councils. The report is said to have helped bring about more attention and understanding for apprenticeship on the part of state staff, who have shown more interest in helping districts understand apprenticeship. However, the study director believes the impact of the report has been reduced because of lack of leadership in this area in the Chancellor's Office.
- Administration of justice curriculum guidelines developed earlier under the sponsorship of the Chancellor's Office were updated. The revised curriculum includes a five-course core curriculum and 14 elective courses. The core curriculum had been adopted by two out of four administration of justice program directors interviewed. Lack of a directive from the Chancellor's Office or district level requiring use of the curriculum was cited as a reason for not adopting it.
- Slide-tapes and accompanying brochures were prepared illustrating opportunities for men and women in the apprenticeship trades. These materials, "The World of Apprenticeship," "Carpenters," "Auto Mechanics," "Operating Engineers," and "Culinary Occupations," were duplicated in quantity and sent to community college and secondary districts statewide. The slide-tapes have been used in career centers, career exploration classes, community outreach presentations, and other workshops, as well as for individual viewing. All users contacted in the study said the materials were excellent.
- The Adult Career Planning Inventory (ACPI) was developed in 1978-79, field tested in several Southern California community colleges, and disseminated in workshops the following year. Seven community colleges requested and received packets of ACPI materials. The inventory was incorporated into a computerized occupational assessment program developed by one of these colleges with VEA project funds in 1980-1982. Other colleges appeared to have had difficulty in arranging for computer processing, and found that other tests or career information systems already available to them performed essentially the same functions.

had been used or were being used to affect community college education. For example, information in research reports had been used to draw attention to problems existing in apprenticeship programs, to structure an agriculture program for migrant workers, to make decisions about the mandated state career information delivery system, and to prepare other required reports. The most ambitious of these research projects, a three-year longitudinal study of students at 15 colleges, was not completed until 1981, and the final report has only recently been circulated. Consequently, the impact of this study of the characteristics of students was not fully realized when this follow-up study report was prepared. No evidence was found that the research results of four other projects had any identifiable impact on community college education in California.

Curriculum

Curriculum guides or other instructional materials were developed in nine projects. Products of only three projects in this group were being used with any frequency by community college instructors. Two were projects that prepared curriculum materials specifically for community college instruction; the third was a joint project that involved community college instructors in planning the curriculum and received the Chancellor's Office endorsement of the products for use in beginning and remedial classes. College staff who were contacted about unused products of other projects reported that: a newly-developed training program was discontinued when the student/employer demand for training decreased; instructors may not have been aware of media products, or did not know where to obtain copies; and other curriculum materials were perceived as being suitable primarily for high school programs.

Gender Equity

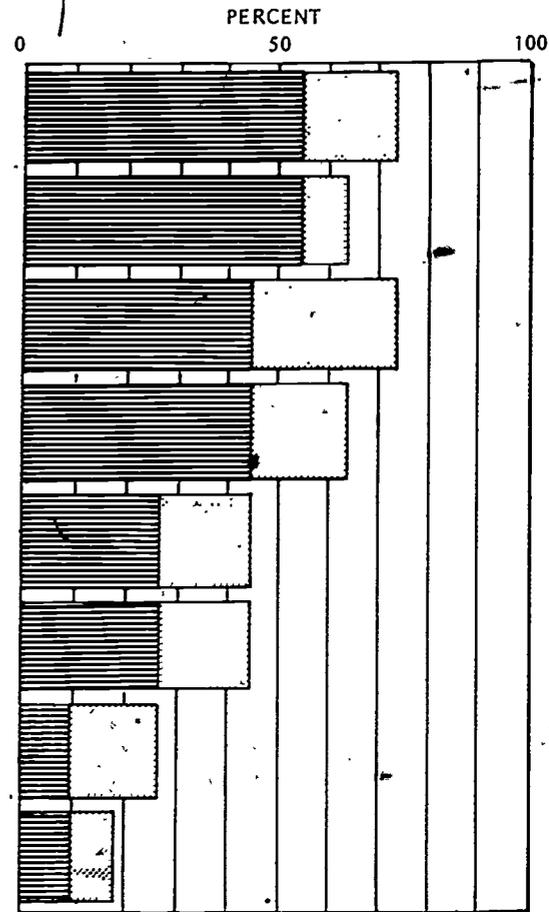
Resource materials intended to promote gender equity in vocational education were developed in nine projects. As shown in Figure 4 on the next page, the responses of 12 directors of 1981-82 projects dealing with gender equity indicated that the products of four of these projects are still enjoying moderate use; products of four other projects have only limited use two to three years after their production. The majority of the survey respondents were unaware of the existence of most of these gender equity materials.

Guidance and Counseling

Three projects resulted in products for use in vocational guidance and counseling, none of which was widely used by community college guidance staff. The product of one project was never published, and only isolated use of materials produced by the other two projects was reported. Attendance of community college staff at project dissemination workshops was low, perhaps because the projects were based at secondary institutions. The materials may have been more appropriate for use in high school programs or perceived as too similar to existing materials to warrant the cost of adoption.

Figure 4
USE OF GENDER EQUITY RESOURCES

- Choices and Challenges—A Student Guidebook About Nontraditional Career Opportunities*
- Options and Opportunities—A Community College Educator's Guide for Nontraditional Vocational Program Improvement*
- Slide-tapes: "World of Apprenticeship," "Carpenters," "Auto Mechanics," "Operating Engineers," and "Culinary Occupations"
- Eliminating Sex Bias in Vocational Education: A Handbook for Administrative Personnel*
- Moving Toward Sex Equity in Vocational Education*
- Resource Bank for Overcoming Sex, Bias and Stereotyping in Vocational Education*
- Eliminating Sex Bias in Vocational Education: A Handbook for Community Groups*
- Overcoming Sex and Racial Imbalance in Vocational Education*



 Used the resource.
  Knew about the resource, but had not used it.

PROJECTS RESULTING IN SERVICES

Nature of the Projects

Nearly \$1.1 million were spent by the Chancellor's Office for nine projects that made various kinds of services available to community college educators and/or to the Chancellor's Office. These projects reflected concern at the state and local levels about data collection, support services for guidance and counseling, dissemination of resource materials, needs assessment, and student placement. The distribution of the nine projects is shown in Table 11 on the next page.

Source of Follow-Up Information

Operational managers of all nine projects were interviewed, and reports of the projects and related follow-on projects were reviewed. Site visits were made to three of the nine projects. Inquiries were sent to recipients of services of two of the projects. Where appropriate, individuals interviewed during site visits to other projects were asked about their use of the services that resulted from projects in this group.

Table 11
DISTRIBUTION OF PROJECTS RESULTING IN SERVICES

Type of Service	Total Number of Projects	Number of Joint Projects	Cost to the Chancellor's Office
Occupational data services	3	1	\$ 461,926
Guidance support services	2	2	411,641
Distribution of resource materials	2	2	106,946
Local needs assessment	1	—	74,650
Statewide placement service	1	—	28,080
Total	9	5	\$1,083,243

What Was Learned About the Projects

No precise records were obtained on how several of the VEA-funded services had been used by community college educators. Based on the available information, it can be said that over half (55%) of the funds spent for these projects by the Chancellor's Office resulted in services that were cost-effective in terms of benefits to community college educators or students. The services supported with the remaining funds did not seem to have had enough use by community college educators to justify their cost.

The nine projects that provided services were categorized into groups according to the type of service provided: data collection, guidance and counseling, and dissemination. Two projects that did not fall into any of these categories were placed in an "other services" category. The following paragraphs contain findings about how services in each category were used by community college educators.

Occupational Data Services

Three projects claimed nearly half of the funds spent in the service category for activities related to collecting occupational program data. Of these, two projects originated by the Chancellor's Office had a direct, significant impact on the evolution of data collection procedures currently used by California community colleges. Participation of the Chancellor's Office in the third project was mandated by state and federal legislation requiring the development of a statewide system for managing occupational information. Results of this last project were used infrequently by community college educators, perhaps because no concerted effort was made to disseminate publications of the project to local colleges or to provide training in their use.

Guidance and Counseling Services

Activities and services initiated by the two projects in this category have been continued or expanded in the years since special funding ended. The outcome of one project, the EUREKA career

EXAMPLES OF PROJECTS RESULTING IN SERVICES

In 1979 a Subpart 3 grant was awarded to the developers of the Student Accountability Model (SAM), a student follow-up system sponsored by the Chancellor's Office and voluntarily implemented, at that time, by at least 57 California community colleges/districts. The funds were used to conduct a survey of current SAM users, identify 14 exemplary practices, and train personnel from nine colleges who were interested in adopting an exemplary practice to improve the SAM system at their colleges. Representatives of five of the adopting colleges responded to follow-up inquiries two years later. One said the exemplary practice had been implemented, resulting in improved follow-up procedures, record keeping for program compliance, and VEA budget records. Two said that the practices they investigated had not been implemented, but they hoped that they would be used in the near future. Two had found that the practices they planned to adopt were impractical for their applications. In 1981, information about significant improvements in SAM gathered in the 1979 survey was incorporated into a revision of the *SAM Operations Manual*.

In 1979, a joint grant funded continued development of the California career information system, EUREKA. The data base was expanded; counselor handbooks and other supporting materials were produced; and training sessions were conducted at 91 user sites, including 32 community colleges. When this grant expired, EUREKA staff continued the project with user fees and donated space, time, and equipment. In 1982, with a \$211,000 annual budget, the no-frills operation cut fees to compete with systems marketed by a major publisher and another large corporation. EUREKA was used 5,254 times on community college campuses in 1980-81, and was installed on at least 50 college campuses in May 1982. The system is extremely user oriented: staff provide on-site training, hold user conferences twice a year, and meet regularly with a user advisory committee. Modifications and expansions are made continuously in response to user needs. In 1982, EUREKA staff were contracted to assist the California Occupational Information Coordinating Committee in the development of data for the career information system mandated by federal and state legislation.

In 1977-78, project funds were awarded by the Chancellor's Office to continue development of the landscape placement project, a statewide service to match employers in the landscape industry with graduates of community college programs that use an accredited curriculum developed earlier by the project in cooperation with industry. Attempts to make the placement service self supporting failed, and in the fall of 1981, it was taken over by the California Landscape Contractors' Association. It is operated now on a fee basis out of their Sacramento office. The close working relationship between the industry and participating colleges has been maintained through annual statewide meetings and individual contacts.

information system, is now a self-supporting service with installations in at least 50 community colleges or districts and 100 high schools in California. One activity of the second project was to train counselor master trainers who continue to serve as presenters in inservice activities for community college personnel; the career guidance specialist hired for the project is now a full-time member of the Chancellor's Office staff.

Dissemination Services

Two agencies concerned with the distribution of vocational education materials received joint funding in 1977-78. All community college agriculture instructors interviewed for this study reported that they had used materials produced by one of the agencies, a publisher of agriculture instructional materials. However, most of the community college educators interviewed were unfamiliar with the services of the other agency, the state vocational education dissemination system (VOICE), which accounts for infrequent use of this service by community college personnel.

Other Services

Two additional grants supported a statewide needs assessment project and the continuation of the development of a statewide placement service for the landscape industry. With technical assistance from project staff, nine colleges conducted local needs assessments using a model developed by the project for a statewide needs assessment. Administrators of seven of the local assessments reported that the assistance provided was especially timely, as it led to information useful in a period of "retrenchment." Services of the landscape placement project were maintained by project staff until they were taken over by the California Landscape Contractors' Association. The project was used as a model for cooperation between industry and education in developing a curriculum for training employees for the agriculture chemical industry.

Discussion of the Findings

Critical characteristics of products and services which were well-used by community college educators included quality in production, endorsement by the Chancellor's Office and/or a professional agency, recognized use for the information or service, an effective distribution mechanism, and easy access to the product or service.

It appeared that products were not likely to be used by local community college personnel if they were out of date, perceived as primarily suitable for secondary educators, duplicated materials already on hand, required program modifications, or simply were not distributed to community colleges. Services were not used by community college educators if they were not informed about them, or if they considered other similar services more useful in their situations.

It should be noted that the products discussed did not include project reports describing model programs. With a few exceptions, no evidence was found that such reports were being used to replicate programs.

It seems likely that different problems will be associated with promoting the use of products developed by more recent special projects, which have received funding only from the Chancellor's Office. One change will be the growing number of videotapes being produced and the need to provide copies for local ownership. Another change is the increased production of specialized materials which require training in their use, such as bilingual counseling materials, materials for infusing career information into curriculum, and materials related to uses of the computer.

Some exemplary dissemination activities were funded by the Chancellor's Office in 1980-1982 to refine and introduce materials developed for the handicapped to community college educators. This type of activity, which brings worthwhile products of several related projects to the attention of potential users, should be repeated in other content areas.

VI ISSUES AND IMPLICATIONS

The long-term impact of the 102 VEA special projects examined in this study was as varied in nature and degree as the projects themselves. The extent of the impact any individual project had was usually difficult to determine for two reasons: cause-effect relationships have become blurred in the three or four years since many of the projects officially ended; and records of project activities and outcomes often were not maintained regularly either during or after the funding period. Consequently, the study team was forced to probe carefully for direct and indirect evidence of project impact, often relying on anecdotal information provided by cooperative college and agency staff who may not have remembered exactly how projects operated and evolved, for example, from 1977 to 1982.

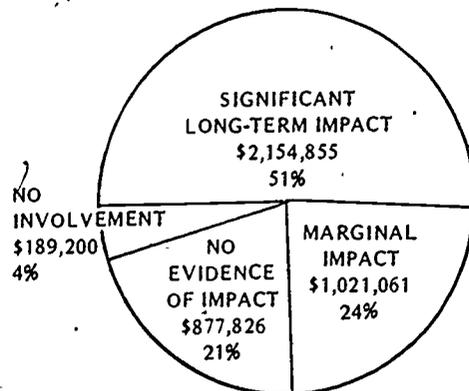
In spite of these facts, sufficient objective and subjective data were collected from field staff and other sources to reveal clear, strong issues that influenced the immediate and delayed impact of the projects studied. The analysis of these data has led to a new, broad perspective on the VEA special project program. The observations and recommendations included in this section have implications for several audiences: those who determine policy related to funding special projects, the planners of future projects, and managers and monitors of ongoing projects.

Considering the different levels of success projects reached before they ended, the lapse of time since they ended, and the funding constraints community colleges have experienced during this period, the long-term impact of the projects and their status today is commendable. About half of the \$4.2 million spent by the Chancellor's Office in the 1977-78 and 1978-79 funding cycles was claimed by projects

that have had a significant long-term effect. Services or programs initiated with the VEA project funds have been continued at the institutions where they were implemented; personnel training activities have contributed to the improvement of vocational education and related services at participants' colleges; or products and services have been used by intended beneficiaries statewide.

About one-fourth of the funds were used for projects where the long-term benefits were only marginal, considering the amounts spent; only a few isolated instances of beneficial outcomes were reported, or products were used infrequently. The remaining funds were claimed by projects for which no evidence of lasting impact was found, or which did not serve community college education initially.

LONG-TERM IMPACT AND
COST OF PROJECTS STUDIED



An indirect indication of the positive long-term impact of the special projects is the fact that 78% of the project directors or

coordinators were still working, in June 1982, in the district or agency that received the special funds in 1977-1979. Only 11% of the project managers were working elsewhere, and another 11% were not located. Other sources of information were used for projects when managers could not be reached. In most cases, the individuals who were responsible for project management were district employees who had taken this assignment; in some cases, specially-hired employees were retained after VEA funding ended. This continuing presence of project staff was, without a doubt, a factor in the continuation of project programs and services.

Several "success" and "failure" patterns emerged from careful analysis of the findings of this follow-up study, findings from related research and evaluation studies, information about more recent projects, and the expert opinions of the experienced vocational education and student services administrators who served as consultants to the study. The important issues that seem to be strongly correlated with the relative success or failure of the special projects studied, in terms of continuing benefits, are:

- State-level coordination and leadership;
- Development, dissemination, and adoption of project models and products; and
- General and specific funding policies.

Each of these issues and related implications are discussed in detail below.

Issue One: STATE-LEVEL COORDINATION AND LEADERSHIP

A recurring theme in discussions with project personnel, beneficiaries, and the six consultant advisors to the study was the importance of strong leadership from the Chancellor's Office, in order to maximize the benefits of the special project funds. Inadequate state-level coordination in crucial project phases—planning, development, and dissemination—often led to duplication of effort, delays and confusion in initiating and implementing projects, and reduced or limited use of project products and services:

The importance of this particular element in the immediate and long-term impact of the special projects cannot be overemphasized. State-level leadership and coordination affects every issue discussed here. It is understood that planning and managing a large, comprehensive funding program at the state level is a very complex and difficult task. It is also clear that successfully operating a local special project is difficult too, when field conditions change unexpectedly, proposed activities don't work well, or local administrative staff withdraws indirect but necessary resources. The tasks of both state and local personnel, however, could be simplified with the consistent use of improved planning and monitoring systems.

At the local level, one outcome of the lack of state-level coordination and leadership was the frequent near-isolation of local project personnel who had only vague guidelines to follow and who may not have been in contact with a state monitor who could answer

questions about the expectations of the Chancellor's Office. Special project personnel often did not know about other special projects that focused on similar concerns and activities, consequently they and their colleagues were not able to compare efforts and learn from each other. When unexpected local events disrupted or delayed project activities, staff often were unsure of who or where to call for assistance or advice. And finally, the operators of successful projects often did not have the time, connections, or resources necessary to share their products or services with staff at other colleges.

A variety of local and state-level procedures would help remedy these problems: establishing semi-permanent planning committees to help state-level staff develop statewide priorities and plan projects to meet them; identifying recent and ongoing projects that are related and encouraging networking among project staff; and improving the assistance provided to projects through the monitoring system. Each of these procedures is discussed in detail in the following paragraphs.

Planning Committees

In order to provide sound planning for a comprehensive statewide occupational program improvement effort, three major considerations must be addressed at the state management level:

First, projects must be planned in response to current and pervasive needs for program improvement in California community colleges. Each year through the College Occupational Program Evaluation System (COPES) review process, priority needs for improvement are identified for eight occupational program areas and six support service areas. Data interpretation panels of experts from each area formulate the priorities from data collected annually from all community colleges or from a representative 25% sample of the colleges in the state.

Second, continuity of purpose must be maintained throughout the project cycle, from identification of need through planning and execution of the project to dissemination and adoption of project outcomes. The present management system does not ensure this continuity: too frequently, the responsibility for a project changes hands during the project cycle and the original intent may be reinterpreted or forgotten. For example, numerous projects that were conceived to develop curriculum or model programs for statewide adoption have resulted ultimately in materials or practices tailored to a certain setting that were not intended for use elsewhere.

Third, there must be coordination among projects, so that one project complements, rather than duplicates, another. The present system does not ensure that this coordination occurs, as projects are frequently thought of as independent, unrelated activities. This study, for example, was not coordinated in the planning stages with the concurrent study of uses of allocated funds for program improvement; consequently comparable information was not collected in many instances. Even more distressing is the fact that special project personnel contacted in this and related studies were

often unaware of recent or ongoing project activities in their own region that they were duplicating or that could have been useful to them.

These broad considerations—needs assessment and project identification, continuity of purpose throughout the project cycle, and coordination of related projects—plus the more specific considerations of project design, monitoring, and evaluation, could be addressed by forming semi-permanent advisory committees for each occupational program and special service area addressed by COPES, and for other major areas, such as guidance and counseling, research, and evaluation.⁸ Standing committees composed of the Chancellor's Office staff specialist for the area, one or more occupational deans, and four or five experts from the field could interpret COPES and other relevant data each year; then propose appropriate projects to meet the identified needs. Their assistance could extend to developing project specifications, reading project proposals and selecting contractors, evaluating project outcomes, and making recommendations for continuation and/or dissemination phases. By staggering the membership terms, individuals who were aware of the purpose of each project and how it relates to other projects would be available throughout each project cycle to inform contractors, monitors, evaluators, and others who need this information.

A part of the planning process should be research to identify former and ongoing related projects. A prerequisite for coordinated planning that avoids duplication, this information can be obtained from ERIC, the state dissemination system (VOICE), and the Chancellor's Office records. The Chancellor's Office should make this planning information available to project directors, so that they can take advantage of work already accomplished and seek the cooperation of others working in the same content area.

The Monitoring System

The Chancellor's Office staff member assigned to monitor each project performs an extremely important function as technical advisor to project staff and as the funding agency representative who ensures that the project purpose is carried out as expected. *Performance of the monitoring function needs to be given a higher priority.* For example, long delays that occur in starting projects when communication breaks down between district and campus levels could be avoided if monitors routinely contact project directors soon after the final notification of funding is mailed. If one monitor is assigned to several related projects, he or she can facilitate exchanges of information among their personnel. The monitor can help to ensure that appropriate resources are identified and used; that scheduling and budget problems are recognized and adjustments are

8. The occupational program areas addressed by COPES are administration of justice, agriculture, distributive, health, home economics related, office, technical, and trade and industrial. The special service areas are disadvantaged, handicapped, limited English proficiency, displaced homemaker, gender equity, and consumer and homemaking education.

STATE-LEVEL COORDINATION AND LEADERSHIP

PROBLEMS

- The original purpose of the project was not carried out.
- Projects duplicated previous projects.
- Local knowledge and use of regional and state-level technical assistance was poor.
- Some projects received little or no attention from the assigned state monitors.
- Local project staff were not aware of previous or ongoing special projects that could have been of assistance to them.

RECOMMENDATIONS

- Form state-level advisory committees for each program and service area to study priorities, plan projects, and assist in monitoring, evaluation, and dissemination.
- In the planning process, conduct careful research to ensure coordination among projects and to eliminate duplication of prior projects.
- Improve state staff capabilities for monitoring and advising projects.
- Provide opportunities for managers of related projects to share information about activities and assist one another in meeting objectives.

made; that there is adequate record keeping; that products are of acceptable quality; and that unmet needs are identified and brought to the attention of the appropriate planning committee.

The monitor's role has been performed unevenly by Chancellor's Office staff in the past. Weakness in this area certainly contributed to the lack of impact of some of the projects studied. There has been a tendency for State Department of Education staff to monitor joint projects without the active participation of anyone from the Chancellor's Office. Insufficient monitoring of special projects funded singly by the Chancellor's Office resulted in strictly local impact or failure to meet major objectives. A way must be found to improve the capabilities of state staff in this role.

Project Networking

The Chancellor's Office also has the responsibility to arrange opportunities for directors of related projects to meet, share ideas about problems and solutions, and otherwise assist each other in reaching common goals. On a few occasions where meetings of this type occurred, most of the participants considered the contacts to be extremely beneficial in the implementation of their projects. Other project staff, who did not have similar opportunities to learn about related activities, believed that they might have saved considerable time and effort by making contacts and obtaining necessary management information in this way.

Other ways that project short- and long-term outcomes can be improved through improved leadership and coordination at the state level are included in the discussion of other major issues: the issue of development, dissemination, and adoption of models and products, and the issue of funding policies.

Issue Two: DEVELOPMENT, DISSEMINATION, AND ADOPTION OF PROJECT MODELS AND PRODUCTS

"In 1978-79, 51% of the Subpart 3 funds were allocated to districts and approximately 49% of the funds were set aside for projects that would have *applicability to districts throughout the state.*" (Italics added.)

This statement appears in the "Issues" section of Volume II of the *California Five-Year State Plan for Vocational Education*. We have identified 34 projects, funded in 1978-79 and the previous year, that can be classified as "local" according to the specifications of Section III of this report: that is, they have had impact on one college or, in a few cases, on several neighboring colleges.

We also noted that, in fact, many of these projects could have had "applicability to other districts throughout the state." However, with a few exceptions, there was no evidence that the practices or other outcomes resulting from these projects have been adopted by personnel on other campuses. Yet many had been proposed as "model" or "exemplary" projects.

Obligations and responsibilities regarding the dissemination of project models, products, and services must be clarified: colleges that receive VEA special project funds should consider the needs of other colleges in implementing projects and should share project outcomes with other colleges; and the Chancellor's Office should actively monitor and assist in these processes. If the special funding for "model" and "exemplary" projects is justified on the basis that development costs will be saved at other institutions where the models are adopted, then project staff and Chancellor's Office staff must give dissemination and adoption activities a higher priority.

This problem, one of the most important issues that surfaced in impact study, deserves prompt attention by the Chancellor's Office, since a major portion of the Office's special project funds are awarded each year for local projects that benefit single institutions.

It is possible to summarize the problems that affect the replication of model programs and the adoption of products, as these factors were identified by local personnel and study staff. The project phases—development, dissemination, and continuation or adoption—and recommendations for addressing the problems in each are listed and discussed on the following pages.

Development

Adoption potential can be enhanced by involving personnel who are representative of community colleges statewide in the developmental and field-testing phases. The SAM (Student Accountability Model) project, developed with a series of Subpart 3 project grants, successfully used this strategy. Initially SAM was designed with the assistance of a 12-member consortium committee of administrators from representative California community colleges to meet a need identified through COPES for a reliable student follow-up system.

DEVELOPMENTAL PHASE

..... PROBLEMS

- There was no intention at the project level to develop a transferable model or product.
- There was insufficient involvement of non-local personnel, who might adopt the model or product, in planning or review.
- The model or product duplicated an existing model or product.

..... RECOMMENDATIONS

- Clarify the obligations of project recipients to develop models and products that are transferable to other colleges.
- Require that each major project create a technical advisory committee from representative colleges to assist in product design, field testing, and dissemination.
- Conduct careful needs assessment, including research into previously developed products.

Chancellor's Office staff and other occupational educators also provided ideas for the model's development. The consortium members were willing to utilize the model in their own colleges. Since 1978, SAM has been adopted, at least in part, by nearly every community college in California. In many cases, the implementation of SAM on individual campuses has been facilitated with technical assistance funded through SAM or peer consulting projects. SAM has continued to receive support from the Chancellor's Office and guidance from the SAM consortium committee.

Similar statewide input was used in developing curriculum materials for fire science and administration of justice programs. These materials have been adopted by colleges throughout the state. Other curricula developed by and for single colleges have not been used except on those campuses.

There is no question that a broad-based approach helps to ensure product quality and eventual acceptance by personnel at colleges other than the originating institution. By forming *consortium committees of technical advisors for each major project*, to advise, participate in project activities, and represent a core of colleges with a vested interest in project outcomes, the benefits of special grants can be extended beyond the recipient college.

Dissemination

To improve the dissemination of project outcomes, it is recommended that a *project review and dissemination process* be established, in which plans are made by the planning committees proposed earlier about how to effectively distribute the worthwhile results of special project activities, or information about them. Implementation of such a process would imply that dissemination would be funded, in most cases, as a separate project phase, subject to approval by the appropriate planning committee or other qualified judges.

Such a two-phase process could also help to alleviate two other time-oriented problems that were frequently associated with inadequate dissemination efforts: (1) funding approval delays often disrupted project timelines so that workshops or other dissemination activities planned for the close of projects were cancelled or rescheduled at inauspicious times; and (2) in many cases a single funding period of 12 to 18 months was insufficient time to plan, develop, test, refine, document, and disseminate a transferable model or product. If dissemination were a specific follow-up phase, project staff could be assured that additional funding would be available for duplication, distribution, conducting presentations and consulting, or whatever other dissemination activities were considered to be effective. In this two-phase process, only those products judged satisfactory would be disseminated; products judged marginal or unsuccessful could be improved, or dropped, thus saving the cost of duplication and distribution.

Using a *variety of dissemination strategies* would also increase the probability that project products and services would be widely used or replicated. This study has shown that mailing project reports to individuals on college campuses rarely promoted the use or replication of project outcomes. More innovative approaches to dissemination, such as periodic newsletters describing ongoing and recent projects, regional project fairs, or traveling "roadshows," might enable busy educators to shop more efficiently for interesting projects. College personnel could then request additional information from the Chancellor's Office, or contact project staff to arrange a visit or consultation.

The vehicle exists already, in the PROP project, for brokering *visitations* to exemplary programs by individuals who are interested in replicating them.⁹ *Peer consulting* is also available through PROP. Strengthening this program and assuring its uninterrupted funding should be a priority of the Chancellor's Office. The positive impact of this individualized inservice counterbalances its expense; evidence collected in this study demonstrates that this form of inservice has proven to be as cost-effective as any other, including high quality inservice workshops.

The uneven results achieved when workshops were used for dissemination or staff development indicate the need to examine the more successful presentations, so that effective elements can be replicated in future workshops. Such a study should include dissemination meetings conducted by other special projects, such as those funded under Title IV-C and the Fund for the Improvement of Post-secondary Education.

A fairly conventional, low-cost dissemination strategy that also could be used more effectively is the *publication of a special project catalog or directory*. Such a catalog has been prepared jointly with the State Department of Education in the past, but its publication

9. See page 30 and Appendix A.

1

53

DISSEMINATION PHASE

PROBLEMS

- The project terminated before sufficient attention could be given to dissemination.
- The project report was not a useful dissemination tool.
- Care was not taken to address information about the project directly to potential beneficiaries.
- The project was not endorsed and publicized by the Chancellor's Office.

RECOMMENDATIONS

- Fund dissemination as a separate project phase.
- Review projects and plan appropriate dissemination.
- Publish a catalog to inform managers of other projects and other community college educators about model programs, products, and services.
- Publish a more detailed *California Community College Directory*.
- Fund visitations to exemplary projects, consultations by project personnel, and other personal contacts between developers and users.

has been delayed for as long as two years. It is recommended that the Chancellor's Office publish an annual catalog or directory of its current special projects, including the names of local contact persons. Since it is important that such a catalog (and other products) reach intended beneficiaries, an accurate statewide list of the college staff responsible for various special services should be developed also. The catalog and mailing list information could be transmitted and updated by computer tape or direct computer linkages; as these technologies become more available to colleges.

These comments and recommendations apply equally to the dissemination of special project services, models, and products. An additional point must be made, however, about the dissemination phase of media-producing projects: project budgets should include adequate funds to *reproduce sufficient quantities of media products* such as slides, audiotapes, and videotapes. Copies should be sent to each college district, or to county or regional resource centers where they will be readily accessible to community college users.

Continuation

Perhaps the most important problem associated with the continuation of model projects was the often abrupt end of VEA project funding. Some colleges did receive second- and third-year funding to refine models, disseminate information about them, and help staff from other colleges adapt the model to suit their individual needs. For some colleges that received large one-year grants, however, the end of special VEA support meant that program components were cut and staff were lost. In this partial or inoperable form, such projects could not possibly function as "models" for other college staff who wished to observe or otherwise learn how they operated.

CONTINUATION PHASE

..... PROBLEMS

- The model program or product did not fill an institutional need.
- Insufficient resources were available to maintain the program.
- Staff were no longer available to continue the program.

..... RECOMMENDATIONS

- Where appropriate, fund a continuation period to phase out support and to provide funds for:
 - Refinement of the model or product.
 - Demonstration workshops.
 - Consultations at adopting sites.
 - Maintenance of records of continuing activities and outcomes.

It appears that *limited additional funds for continuation* would help colleges (1) serve as model sites and (2) integrate special project activities into their local budgets. Of course, this continuation option would be available only to projects that are considered successful by the appropriate planning committees or other qualified judges. Approved projects would be eligible for small continuation grants to enable them to retain staff and continue services for another six months or a year.

This study highlighted one aspect of project continuation that deserves the immediate attention of state and local leadership. If the long-term impact of federal vocational education funding is to be accurately described for policy and decision makers at all levels, procedures must be implemented at the local level to *improve the documentation of continuing activities and impact* resulting from these "seed" monies.

The local administrator responsible for vocational education should be informed of this need for follow-up information. This study has shown that most local educators will not continue to record information about project-related activities or benefits unless they are instructed to do so and provided with resources for this. Also, to ensure that comparable information is available from all projects, the Chancellor's Office should provide reporting forms, or at the very least, specific instructions about the types of data required, such as enrollment and placement statistics, records of additional dissemination, evidence of adoption, descriptions of changes in instructional programs and services, and other measures of long-term impact.

Similar routine follow-up reports should be requested also from participants at inservice activities within one year of the event. This timing will allow them time to apply the information acquired, and they should still be able to recall the inservice activity in question.

Adoption/Adaption

Additional funds, combined with the more subjective issue of college individuality, also influence whether a project, product, or

service will be widely adopted by other colleges. The State Department of Education has successfully used *small adoption/adaption grants* (\$5,000 to \$10,000) to help schools and districts implement exemplary career education programs developed under Title IV-C. The grants subsidize purchase of the exemplary project materials, staff training, and consultations by personnel from the exemplary programs. Grants similar in amount and scope would be a practical way to encourage the adoption or adaption of VEA model programs, services, or products. Again, these grants would be available only for adoption of effective, generalizable models or products by colleges that were committed to using them.

Another basic problem that thwarts adoption of new programs or products, almost regardless of their value and effectiveness, is the very human tendency of college personnel to think that their situations are unique; also, they often are unable to see how the components of a program or product can be changed to fit many individual needs. Several community college educators interviewed in this study indicated that they had rejected models they read or heard about without considering the possibility of adopting or adapting portions of the models for their colleges.

This fact has implications for developers and disseminators of model programs, services, and products. Adoption activities must include inservice presentations, visitations, consultations, and/or descriptive reports that *help the potential user recognize that the model can be applied in a variety of situations* and demonstrate how the model can be taken apart, remodeled, and made a creation of the user.

ADOPTION/ADAPTION PHASE

..... PROBLEMS RECOMMENDATIONS
<ul style="list-style-type: none"> ● The model or product did not address a local need, or a similar model or product was already in use at the institution. ● The model or product was not perceived as readily adaptable to local needs. ● There were no resources available for adapting the model or product to local needs. 	<ul style="list-style-type: none"> ● Utilize careful needs assessment with broad-based input in developing models and products. ● Design products with modular components; demonstrate the adaptability of models and products. ● Fund adoption/adaption of successful models and products, including: <ul style="list-style-type: none"> - Materials required. - Staff training. - Consultations with developers. - Resources for making adaptations.

Issue Three: FUNDING POLICIES

Literally hundreds of community college administrators and faculty, as well as education professionals in four-year institutions and private companies, were interviewed or otherwise contacted in this examination of the long-term impact of the VEA special project program of 1977-1979. The attention of the study team was focused directly on the special projects funded during that time period, but information was also collected about other VEA-funded activities—often because college staff were so cooperative in telling about other VEA-funded efforts, including other projects and activities funded with VEA allocations to local colleges.

Several broad, philosophical questions about VEA funding policies emerged after analysis of the special project data and related data concerning certain other VEA programs:

- What are the differences and similarities in intent and outcomes of the allocation program and the special project program?
- Do the present VEA funding policies and programs encourage local initiative and accountability?
- Should the Chancellor's Office continue to fund projects jointly with the State Department of Education?

Allocations Versus Special Project Funding

In addition to the special project money awarded to selected districts, the California community colleges received allocations of VEA funds for program improvement totaling over \$1.2 million in 1977-78 and \$2.1 million in 1978-79. Authorized uses of the funds in the first year were to improve programs and support services for handicapped, disadvantaged, and limited English speaking students. In the second year, the uses of the allocated funds were expanded to include vocational guidance and counseling, personnel training, and activities to promote gender equity.

In examining information about uses of the allocated funds that surfaced unexpectedly as the study team investigated the special project outcomes, it became clear that many colleges were using these funds to continue activities begun with project funds or to take advantage of other special projects. For example, allocated funds were used to pay tutors of academically disadvantaged vocational students, to conduct gender equity workshops for local faculty, and to send instructors to special project inservice meetings. The allocated funds were also used to support program development of improvement activities that were responses to strictly local needs. Given that the guidelines for using the funds do not specify clearly the scope and nature of eligible activities, it is understandable that individual colleges have interpreted the guidelines in ways that permit the most flexibility and responsiveness to local needs.

It was also clear from discussions with local personnel and other researchers that the use of allocated funds was not often guided by detailed documented objectives, as were the special projects, nor were requirements for accountability as well-established and enforced

as they were for special-project funds. Also, the scope and impact of the activities supported with allocated funds were sometimes restricted because of the small amounts available to a college or district to address a specific area, such as services for the handicapped, or displaced homemakers, or other authorized uses.

Several instances were cited by individuals interviewed in the study which suggested that the VEA funding program should provide for special grants to support locally-initiated special projects that conform to the priorities established for uses of the project funds in California community colleges.¹⁰ Because of the limited amount of uncommitted allocated funds available to many districts for major program improvement efforts in specific areas, local personnel have looked to special project funding as a resource for concentrated efforts to solve identified problems. Experienced VEA project directors contacted in this and related research expressed frustration because none of the requests for proposals issued in a given year appeared to address needs they were concerned about, or did not allow them to try out specific solutions they thought would work. Others admitted that they had proposed on the project they were conducting because it was the "closest thing" to what they really wanted to do at their college.

Experience has shown that there are sound reasons for specifying exactly what is expected of each project contractor and how this should be carried out. At the same time, it appears that there could be an avenue for local personnel to submit their ideas for projects that address identified statewide priorities and to have these ideas considered for funding.

It should be possible, in fact, to support worthwhile locally-initiated projects under Section 132 of the Vocational Education Amendments of 1976, which provides for the funding of exemplary and innovative programs that fall within California's comprehensive plan for vocational education program improvement. Only eight of the 142 projects included in this study were funded under Section 132. In the following two years, 1979-80 and 1980-81, no projects were funded by the Chancellor's Office or the State Department of Education under this section. It is recommended that a *limited amount of the Subpart 3 funds be made available each year under Section 132 for locally-initiated exemplary and innovative projects* that address priorities for program improvement identified by the planning committees; but that do not conform to any of the requests for proposals written for that year. To obtain funding, proposals should demonstrate that the project addresses identified statewide needs, and

10. After 1977-78, the special project system did not provide funding for locally-initiated projects. Beginning in 1978-79, all uses of special project funds were predetermined according to a comprehensive plan and priorities suggested by advisory committees. To ensure that the priorities were addressed as intended, requests for proposals included detailed specifications. The result has been the funding of proposals that conform to specifications written by state staff, who presumably are knowledgeable about the needs of colleges statewide and about how individual projects fit into the comprehensive plan for program improvement. Occasionally projects are funded with a planning phase, allowing the contractor, with the aid of technical advisors, to develop a scheme for performing the required work.

certify that other funding is not available for the purpose. Also, funding should go only to projects which the appropriate planning committees consider worthwhile and are willing to sponsor.

At the present time, it is particularly appropriate to *review together the outcomes and impact of the uses of special project and allocated funds*, in order to identify strengths peculiar to each system and perhaps use these as guidelines for strengthening weaknesses in the other. A study of how colleges had used VEA Subpart 3 allocations was being conducted at the time of this special project research. The findings of the two studies should provide a solid data base for reconsideration of current policies and practices with regard to the allocation system and special project funding. It is recommended that a special committee be formed to accomplish such a broad review, and to recommend decisions in regard to distribution and use of the funds, stressing definition of local and state responsibilities and intended objectives of each funding program. The Chancellor's Office and selected colleges should be represented on this committee. It should be noted that two recently-retired occupational deans served as consultants in both of the studies and are in a position to make comparisons and recommendations based on their knowledge of both systems.

Any future examination of VEA funding policies and practices should specifically *include a study of the Subpart 2 allocations for displaced homemakers*. For the years 1981-82 and 1982-83, nearly all of the Chancellor's Office funds for displaced homemakers were

— ALLOCATIONS VERSUS SPECIAL PROJECT FUNDING —

..... PROBLEMS RECOMMENDATIONS
<ul style="list-style-type: none"> ● Uses of allocated funds were not guided by specific, documented objectives. ● Requirements for accountability for allocated funds were not well established. ● In some priority areas, allocations were considered too small to accomplish anything worthwhile. ● Allocated funds for displaced homemakers may not have been used effectively. ● Neither the project nor the allocation funding program provided adequate support for locally-initiated projects. 	<ul style="list-style-type: none"> ● Form a committee of advisors from the impact studies of VEA projects and allocations, plus representatives of selected community colleges and the Chancellor's Office to: <ul style="list-style-type: none"> - Review the study reports and other relevant information. - Compare the management and uses of allocated and project funds. - Compare the immediate and long-term impact of uses of the funds. - Recommend policy decisions in regard to uses of the funds. ● Collect additional evaluation information on uses of displaced homemaker allocations. ● Selectively fund locally-initiated projects under Section 132, Exemplary and Innovative Programs.

allocated to districts, with only a small amount set aside for special projects. In 1980-81, the allocations to districts ranged from \$190 to \$28,249; the average was \$2,783. Serious questions exist about this distribution of funds at a time when districts may have limited experience and/or interest in serving displaced homemakers: Are districts prepared to make effective use of the limited amounts they receive? Are there enough funds in the small allocations to accomplish anything of importance? How often are the funds turned back to the state, so that they may not be used for displaced homemakers at all? It is strongly recommended that the Chancellor's Office sponsor a study of the current uses of these allocations and determine what kinds of adjustments should be made. Perhaps, until more is learned about effective strategies for establishing and maintaining services for displaced homemakers, the resources should be concentrated on refining models and assisting interested districts in adapting these programs, services, or materials to meet local needs.

Joint Funding Considerations.

Another policy-related question that surfaced during the examination of 1977-78 and 1978-79 special projects was whether it was advisable, in terms of cost-effectiveness and impact, to continue funding projects that are supported jointly by the Chancellor's Office and the State Department of Education. Each year since 1978-79 these two agencies have reduced the number of special projects which they fund jointly. Based on the long-range outcomes of the projects studied here, it appears that this action was well taken, for the most part. In many areas, such as curriculum and instructional program content, equally shared benefits for secondary and community college educators simply did not exist.

In other cases, however, it seems that mutual concerns do exist and that shared activities can be more economical and can enhance articulation between the two levels of education. Several jointly-funded inservice projects in this study, for example, were mutually beneficial to secondary and community college participants. These projects were community college or university based. The average cost for the 13,772 participants at 16 jointly-funded inservice activities was only \$98, as compared to \$318 for each of 566 participants at activities presented by five projects funded singly by the Chancellor's Office. It seems reasonable that both secondary and postsecondary educators could benefit from this economy of scale, while at the same time enjoying a greater variety of inservice opportunities. To realize this mutual benefit, community college educators must participate in the joint ventures in greater numbers.

Rather than retreating further from funding projects jointly with the State Department of Education, the Chancellor's Office should *cooperate more actively and more selectively with the Department of Education in areas of common benefit*. In so doing, the Chancellor's Office staff and their advisory committees must take an active role in planning the joint projects, encourage community college vocational education administrators to bid on the projects, provide technical

JOINT FUNDING

..... PROBLEMS

- Joint projects often were perceived as unsuitable by and for community college staff.
- Many joint projects did not respond to needs unique in community colleges.
- Community college staff were not sufficiently involved in planning, implementing, or publicizing joint projects.
- Joint projects often were not strongly and visibly supported by the Chancellor's Office.

..... RECOMMENDATIONS.

- Use more community college personnel in joint projects as planners, advisors, and workshop presenters.
- Assess community college needs and sponsor joint projects that respond to these needs.
- Encourage community college staff to bid on joint projects and provide them with technical assistance that will improve their chances of receiving joint project awards.
- Strengthen the Chancellor's Office participation in the planning, monitoring, and publicizing of joint projects.

assistance to improve their chances of receiving joint grants, participate actively in the monitoring of joint projects, and endorse and publicize their activities and products. In addition, new formats for inservice meetings or research reports, for example, may facilitate the shared and separate functions. This careful, active involvement of community college educators should ensure that their special interests, as well as the common interests of community college and secondary educators, will be adequately represented in the joint projects.

APPENDICES

Appendix A INDIVIDUAL PROJECT REPORTS

INTRODUCTION

The following individual project reports are arranged in the same three major categories that were discussed in the body of this report: (1) local projects, (2) statewide personnel training projects, and (3) projects that resulted in products or services for statewide use. Within these categories, the projects are grouped according to their major focus.

The projects are listed in the "Contents," beginning on the next page. A "Subject Index" appears at the end of this appendix on page 104, immediately followed by an "Agency Index" printed on colored paper. These aides will help locate projects that were conducted by a specific agency or that addressed a specific topic.

For each project the following information appears:

Project title. In some cases, original project titles have been modified to clarify the nature of the project or for consistency in wording.

Agency. The recipient of the project funds.

Director's name.

Project number.

Funding source and cost. For projects funded singly by the Chancellor's Office, *(C)* appears after the project number, followed by the *cost to the Chancellor's Office*. In this case, the amount shown is the *total* claimed by the project. For projects funded jointly by the Chancellor's Office and the State Department of Education, *(J)* appears after the project number, followed by the *cost to the Chancellor's Office*. In this case, the amount shown is *half the total* claimed by the project: the half paid by the State Department of Education is not shown.

Project dates. These dates show when the projects actually started and ended, as accurately as can be determined from project final reports and records supplied by the funding agencies.

Project Overview. This portion of the report summarizes what occurred during the funding period.

Follow-up findings. This paragraph summarizes what was learned in the follow-up research about what happened after the funding terminated, and about the long-term impact of the project in California community colleges.

Information source. This individual can be contacted at the present time for additional information about the project. In most cases, this person was the primary source of follow-up information for the project.

CONTENTS

	<i>Page</i>
INTRODUCTION	57
LOCAL PROJECTS	
SUBPART 2	
Displaced Homemakers	
Displaced Homemakers—Homemaker Placement Project	62
Displaced Homemakers—Project Crossroads	62
Displaced Homemakers—Continuing Education for Women	62
Displaced Homemakers—Project Discover	63
Displaced Homemakers—Displaced Homemaker Project	63
Displaced Homemakers—Working Women	64
Displaced Homemakers—Homemaker Aide Program	64
Displaced Homemakers—Community-Based Cooperation to Develop Services for Displaced Homemakers	65
Displaced Homemakers—Career Planning Center, Inc. and Compton College	65
SUBPART 3	
Local Research	
Needs Assessment for Occupational Education Home Study Course and Other Programs	65
Identification of Curriculum for New and Emerging Occupations: A Model System	66
Exemplary and Innovative Programs	
Establishment of Exemplary Energy Related Programs	66
Cooperative Student Placement Service	67
Curriculum Development	
Electronics Curriculum Development	67
Project Open Shop	67
A Model Bilingual Medical/Dental Receptionist Program	68
Project EXCITE (Curriculum for Maintenance Technicians)	68
Vocational Guidance and Counseling	
Career Planning Services for Feeder High Schools	68
A Personal Development Guidance Program Using Small-Group Learning	69
A Model Vocational Guidance and Counseling Program for Weekend and Evening Students	69
Bay Area Cooperative Education Clearinghouse (BACEC)	69
The Mid-Life Career Redirection Center	70
Gender Equity	
A Model Project to Reduce Sex Barriers in Vocational Education	70
Recruiting and Training Tradeswomen as Occupation Teachers	71
Disadvantaged	
Recruitment and Retention of Disadvantaged Students (New Horizons)	71
California Youth Alternatives Project: San Bernardino Site	72
A Program to Strengthen the Reading and Writing Skills of Vocational Students	72
Basic Skills Curriculum for Disadvantaged and Limited-English Speaking Students	73

	<i>Page</i>
Technical Language Skills Development in Reading and Writing.....	73
Early Recognition of Disadvantaged Students (ERDS)	74
Handicapped	
A Machine Tool Technology Program Accessible to the Physically Handicapped.....	74
A Vocational Assessment System and Cooperative Work Experience Model for Disabled Students.....	74
A Study of Word Processing Competencies With Implications for Handicapped and Disadvantaged Students.....	75
SUBPART 5	
Mini-Units in Parenthood Education.....	75
STATEWIDE PERSONNEL TRAINING PROJECTS	
PRESERVICE TRAINING	
Single Subjects Credential	
Competency-Based Preservice Teacher Education Program for Office and Distributive Education.....	77
Agriculture Preservice Education.....	77
Designated Subjects Credential	
A Statewide Vocational Education Teacher Credentialing Program	78
Competency-Based Teacher Preparation for Part-Time Teacher Credentialing.....	78
Training for Teacher or Counselor Educators	
Industrial Education Teacher Educator Inservice Training	78
Training for Home Economics Teacher Educators in the Use of the MATCHE Curriculum	79
Pupil Personnel Trainer Update.....	79
INSERVICE TRAINING	
Gender Equity and Special Populations	
Vocational Education Equity Project (VEEP).....	80
Statewide Inservice for Persons With Responsibility for Vocational Education for the Handicapped (FIVE H).....	80
Vocational Guidance for Handicapped Students: A Training Program	81
Inservice Training for Department/Division Chairpersons and Members of Protected Classes in California Community Colleges	81
Subject-Matter Areas	
Agriculture Inservice Education	82
Fire Science Teaching Methodology	82
Home Economics Inservice Education: Fashion Merchandising.....	83
Consumer and Homemaking Education Inservice Education.....	83
HERO (Home Economics Related Occupations) Inservice Education	83
Industrial Education Inservice Education	84
Industrial Education Inservice Education	84
Office and Distributive Education Inservice Education.....	84
Teaching and Counseling Techniques	
A Program to Improve Instructional Effectiveness in Vocational Education	85

	<i>Page</i>
Career Counseling Task Forces	85
Individualized Inservice Activities	
Planning for <u>Renewal</u> in Occupational Programs (PROP)	86
Dissemination Through Use of Peer Consultants	86
Management	
Inservice Training for Vocational Education Administrators	86
Inservice Training for State Professional Staff	87
Work Experience Education and CETA	
Work Experience Education Inservice Education	87
-CETA Workshops: Orientation for Local Administrators and Inservice Training in Job Development	87
Miscellaneous Topics	
Coordination of Common Personnel Training Activities	88

PROJECTS RESULTING IN PRODUCTS OR SERVICES

PROJECTS RESULTING IN PRODUCTS

Research Reports	
Statewide Longitudinal Study of Community College Students	89
Analysis of Instructional Apprenticeship Services in Public Schools	89
A Compative Study of Computerized Career Information Systems	89
Emerging Occupations in Agriculture: Impact Upon Curriculum and People	90
Handbook for Developing Competency-Based Curricula for New and Emerging Occupations	90
A Study of Recruitment and Retention of Disadvantaged Students in Community College Technical Programs	91
California Youth Alternatives Project Evaluation	91
Evaluation Study of the Outcomes of Vocational Education Special Projects	91
Strategies for Improving Rural Vocational Education	92
Curriculum Materials	
Administration of Justice Curriculum Update	92
Business Education Program Guide. Word Processing, Legal Secretarial, Medical Secretarial, and Banking/Finance Supplements	92
Fire Science Curriculum Development	93
Health Careers Curriculum Development	93
Learning Activity Packages for Health Occupations	94
Consumer Education Audiovisual Mini-Units	54
Home Decorating and Furnishings Occupations Curriculum Guide	94
Curriculum for Training Wastewater and Water Treatment Plant Operators	95
Media and Curriculum Development for the Handicapped	95
Gender Equity Resources	
Fostering Sex Fairness in Vocational Education	95
A Study of Vocational Enrollments in Terms of Sex and Racial Balance ..	96
Resource Bank for Overcoming Sex Bias and Stereotyping in Vocational Education	96

	<i>Page</i>
Research to Identify, Analyze, and Disseminate Information About Opportunities for Males and Females in Nontraditional Occupations . . .	97
Strategies to Recruit and Retain Students for Nontraditional Programs and to Assure Program Completion and Placement	97
Materials for Training Vocational Education Administrators in the Elimination of Sex Bias	97
Materials for Community Groups on Sex Bias in Vocational Education . . .	98
Counseling Materials to Promote Sex Equity in Vocational Education . . .	98
Vocational Guidance and Counseling Materials	
Adult Career Planning Inventory	98
Improved Vocational Guidance Programs for LES/NES, Out-of-School Youth, and the Gifted	99
Vocational Guidance Resource Handbook	99
PROJECTS RESULTING IN SERVICES	
Occupational Data Services	
Data for the Allocation Formula and Vocational Education Reports	99
Development of a California Occupational Information System	100
Procedures to Utilize Student Follow-Up Information (SAM) in Course and Program Modification	101
Guidance and Counseling Services	
EUREKA: The California Career Information System	101
Implementation of a Statewide Personal and Career Development Plan for Vocational Education	101
Dissemination Services	
California Statewide Dissemination System for Vocational Education (VOICE).	102
Vocational Education Productions: Instructional Materials for Agriculture Education	102
Other Services	
Vocational Education Needs Assessment Project	103
Continuation of the California Landscape Placement Project	103
SUBJECT INDEX	104
AGENCY INDEX	105

LOCAL PROJECTS

SUBPART 2

Displaced Homemakers

Displaced Homemakers—Homemaker Placement Project

Chaffey Community College District
Director: Jeanne Hamilton

Project No. 36-67660-2-9-010 (C)¹ Cost: \$17,800
July 1, 1978 to June 30, 1979

Project No. 36-67660-2-9-020 (C) Cost: \$18,040
March 15, 1979 to October 31, 1979

Project Overview

This was the first year of a two-year pilot program to provide displaced homemakers access to education and/or employment opportunities they need to become self-supporting. Seventy-one women enrolled in a 12-week structured program of counseling, classroom instruction in topics such as self-awareness and job seeking skills, and job placement assistance. Individual participants were followed up, to help ensure successful educational pursuit or employment. Project staff assisted these women in setting realistic employment goals and provided them with information about skills training opportunities, existing college and community resources, and job seeking information. Counseling, advisement, job seeking skills training, and job placement assistance were provided to 150 additional clients in the off campus centers where project activities were based.

Follow-Up Findings

The program was funded again in 1979-80. In March 1980, the project director left the college. In June, the Women's Center, the headquarters for the program, was permanently closed and all project activities were terminated. Prior to this, in the months of January through June, 40 students were served in the 12-week program. When it ended, 11 had been placed in full-time, part-time, or temporary employment, four were seeking jobs, 12 were enrolled in vocational or other college courses, and 13 had not decided what they would do, had postponed seeking a job, or had dropped out of the program. In addition, displaced homemakers not in the structured program were assisted: 54 were referred for interviews with employers, resulting in 18 placements, and 24 resumes were written by the placement aide.

Information Source

Leonard Martyns
Associate Dean, Instructional Services
and Vocational Education
Chaffey College
5885 Haven Avenue
Alta Loma, CA 91701
(714) 987 1737

1. (C) indicates that the project was funded singly by the Chancellor's Office. (J) indicates that the project was funded jointly by the Chancellor's Office and the State Department of Education. The amount shown in each case is the cost to the Chancellor's Office only.

Displaced Homemakers—Project Crossroads

Los Rios Community College District, Cosumnes River College

Director: Allene Murdoch

Project No. 34-67371-2-9-010 (C) Cost: \$10,297
July 1, 1978 to June 30, 1979

Project No. 34-67371-2-9-020 (C) Cost: \$19,730
March 15, 1979 to September 30, 1979

Project Overview

Project Crossroads provided displaced homemakers in the Sacramento community with a two-semester re-entry program to facilitate development of their marketable skills, decision-making, career planning, and enhancement of self-esteem. In 1978-79, 61 women attended for at least one semester. Regularly-scheduled courses were offered off campus in English, sociology, human development, business math, and speech. Special workshops in study skills, math skills, stress management, and life goals planning were also offered. Personal and career counseling, an intern program, and placement assistance were other features of this program. Twenty-four of the participants were employed in paying jobs in June 1979.

Follow-Up Findings

Project Crossroads received additional VEA displaced homemaker funds in 1979-80. Forty-six women enrolled in the re-entry program in the second year. Ten who completed the two-semester program were employed when it ended, 15 others were continuing occupational training. Project Crossroads was terminated when the VEA project funding expired. Individuals who were served by the project described the positive impact it had on their lives in the newsletter, *Crossroads People*.

Information Source

Allene Murdoch
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

Displaced Homemakers—Continuing Education for Women

Merced Community College District

Director: Lynn Moock

Project No. 24-65797-2-9-010 (C) Cost: \$20,000
July 1, 1978 to June 30, 1979

Project No. 24-65797-2-9-020 (C) Cost: \$15,000
March 15, 1979 to September 30, 1980

Project Overview

VEA funds were combined with funds from Title I of the Higher Education Act, CETA, and EOPS to develop a three-pronged program of centers with intensive peer support, re-entry classes, and community service workshops for displaced homemakers in Merced, Los Banos, and Dos Palos. At least 25 persons a day visited the centers at Merced and Los Banos to obtain counseling and referral information.

and meet with peers. A 12-unit block of transferable re-entry classes was offered, including "Human Potential," "Career and Life Planning," "Anthropology of Women," "Body Conditioning," and basic English and math. Weekly support group meetings and coffee hours with speakers, monthly luncheons, and a variety of community events related to careers were well attended. Throughout the year, Continuing Education for Women coordinated special workshops and courses on topics such as self defense, self motivation, time management, pre-apprenticeship training, and other subjects of concern to the displaced homemakers. A total of 5,110 women participated in these activities, including 397 who enrolled in the re-entry classes and 461 who enrolled in other classes.

Follow-Up Findings

Continuing Education for Women received VEA displaced homemaker project funds in 1979-80 and 1980-81. Essentially the same services were continued. In 1981-82, in spite of severe cutbacks in funds and staff, the program continued to serve 500 to 600 women in a year and to enroll 150 new clients each semester in the 12-unit re-entry program. Subpart 2 displaced homemaker allocations, Subpart 3 gender equity funds, and EOPS funds were used. *Success Stories*, a booklet published by CEW, contains the testimony of women whose lives were affected by this program.

Information Source

Arlene Bireline
Continuing Education for Women
Merced College
3600 "M" Street
Merced, CA 95340
(209) 384-6231

Displaced Homemakers—Project Discover

Sacramento City Unified School District, Fremont School for Adults

Director: Marilyn Geraty

*Project No. 34-67439-2-9-010 (C) Cost: \$14,044
July 1, 1978 to June 30, 1979*

*Project No. 34-67439-2-9-020 (C) Cost: \$16,963
March 15, 1979 to December 31, 1979*

Project Overview

Two grants funded the first 15 months of a two-year pilot project to serve low-income displaced homemakers. The clients, most of whom were welfare recipients, were assisted through community resource interventions to overcome child care, transportation, health, and other problems, provided with testing and counseling, and enrolled in education programs to improve their basic skills. They proceeded to enter vocational or apprenticeship programs to obtain job skills, and were encouraged to develop these skills through work experience. The displaced homemakers were provided with nontraditional job information, sex equity awareness training, and instruction in job seeking skills. Existing job resource agencies were used to find jobs for them. Nineteen displaced homemakers participated in the first year. Three completed high school diploma requirements and were enrolled in college or vocational training.

Two others also entered vocational programs and seven continued in the Project Discover program. The remaining seven dropped out because of housing, transportation, health, or child care problems.

Follow-Up Findings

In 1979-80, 68 new recruits were selected from 200 applicants. They were provided with testing, counseling, basic skills and vocational instruction, job seeking skills training, and necessary community resource interventions. When the program terminated, 30 participants were employed in unsubsidized positions and 34 were continuing their occupational training, including several who were enrolled in community college programs. After one year, 94% of the Project Discover participants had either left the welfare rolls or were continuing preparation for employment. The program was not funded in 1980-81 and the services were discontinued.

Information Source

Jo Anna Ito
Sacramento City Unified School District
Skills and Business Education Center
2751 Stockton Boulevard
Sacramento, CA 95817
(916) 454-8351

Displaced Homemakers—Displaced Homemaker Project

San Diego Community College District

Director: Ruth Morris

*Project No. 37-73528-2-9-010 (C) Cost: \$20,000
July 1, 1978 to June 30, 1979*

*Project No. 37-73528-2-9-020 (C) Cost: \$19,900
March 15, 1979 to September 30, 1979*

Project Overview

The purpose of this displaced homemaker project was to provide an initial starting place for displaced homemakers desiring to enter or re-enter the job market or an educational field. Project staff provided emotional support necessary for making the transition from homemaking into the job market, supplied vocational education information, assisted women to enroll in classes leading to gainful employment, assisted in the initiation of new classes as the need arose, and acted as a liaison between the displaced homemakers, the college district, and business and industry. The project office was located in the Adult and Continuing Education District Office and served the entire San Diego Community College District. In a 16-month period, the staff served 881 individuals, made 5,042 client contacts, and conducted a citywide symposium for 700 people. Over 1,000 people attended displaced homemaker workshops titled "Finding Directions," "Exploring Opportunities," "Job Search Techniques," "Who Am I - Where Am I Going?" and "Plan Your Future." Over half the people who replied to a follow-up questionnaire sent to them by project staff had enrolled in classes in the district after their contact with the project. It was estimated that 19% of the 881 clients had found employment after their contact with the project. Two of these clients were employed part-time to fill the project's clerical assistant position.

Follow-Up Findings

In 1979-80, project activities were continued with district Subpart 2 and 5 allocations. In 1980-81, the district received another Subpart 2 project grant to extend the displaced homemaker services to minority women in South-eastern San Diego. A total of 125 new clients attended workshops presented in their communities during this project. At the same time, other services were continued. By June 1981, a total of 1,912 clients had been served by the project, over 5,200 student hours were generated by displaced homemaker workshops. In 1981-82, Subpart 2 displaced homemaker allocations and Subpart 5 consumer and homemaking education funds were used to present workshops on job hunting skills to vocational education classes. 41 of these presentations were scheduled. The displaced homemaker office staff continued to assist clients who called there, but did not actively recruit clients with VEA funds. As an outgrowth of the project, personal development classes were added to the adult school program. Unsolicited letters sent to the project office indicate that the services provided by this project were deeply appreciated by women who were encouraged to seek employment or re-enter school through their contact with the staff.

Information Source

Phyllis Cooper
Displaced Homemaker Services
5350 University Avenue
San Diego, CA 92105
(714) 230-2152

Displaced Homemakers—Working Women

Sonoma County Office of Education, Working Women, Inc.
Directors: Linda Lindsay and Sandra Sweitzer

Project No. 49-10496-2-9-010 (C) Cost: \$19,782
July 1, 1978 to September 30, 1979

Project No. 49-10496-2-9-020 (C) Cost: \$19,425
March 15, 1979 to September 30, 1979

Project Overview

Working Women, Inc. is a community-based organization that assists women in Sonoma County to enter and succeed in blue collar work. Services provided in 1978-79 under the VEA grants included orientations to blue collar work, vocational counseling, tutoring, job development, and placement. Special interest workshops were conducted on topics such as job development, physical fitness, vocational clarification, and communication skills. In the first year of the program, 390 clients were served, of these, 57 were placed in blue collar jobs, 21 in white collar jobs, and 19 in vocational training. Eighteen of the blue collar placements were in apprenticeship programs, a 120% increase in the number of women apprentices in the county. Eighty-eight percent of the women placed were unemployed at the time of placement.

Follow-Up Findings

Working Women, Inc. has continued to receive VEA Subpart 2 project funds: through 1979-80 from the Chancellor's Office and from 1980 through 1982 from the State Department of Education. The program has been streamlined and was expanded until funds were cut in 1981-82.

In 1979-80, 449 clients were served in the Working Women office, 100 outreach presentations were made to approximately 2,000 people, 23 contacts were made with schools, where at least 500 students were reached, and 39 blue collar, nine white collar, and 16 training placements were made. This level of service was maintained through June 1981. In 1981-82, with a reduced budget, Working Women staff concentrated on bringing information about nontraditional careers to local high school, community college, university, and community groups. A product of the project was a scrapbook of women employed in blue collar jobs which can be used to inform others about their experiences. Many of the women whose stories are included recommended that other women learn skills required at the local community college.

Information Source

Sandra Sweitzer
Working Women, Inc.
2544 Cleveland Avenue
Santa Rosa, CA 95401
(707) 523-3167

Displaced Homemakers—Homemaker Aide Program

Victor Valley Community College District

Director: Margaret Jensen

Project No. 36-67926-2-9-010 (C) Cost: \$20,000
July 1, 1978 to June 30, 1979

Project No. 36-67926-2-9-020 (C) Cost: \$17,709
March 15, 1979 to September 30, 1979

Project Overview

In this program, unemployed displaced homemakers were recruited and trained as homemaker aides. Agencies such as EDD and the Department of Social Services referred clients to the project. Fifty students were enrolled in a nine-week program to learn the skills required for entry-level employment as a homemaker aide, the first step on a career ladder leading to professional nursing. The curriculum was designed to meet licensing requirements under consideration at the time. The 20 women and one man who completed the program were assisted with finding jobs or placement in more advanced training.

Follow-Up Findings

The homemaker aide program was discontinued because the local job market for the aides was saturated when the project ended. The program can be reactivated whenever there is a need. The former director and the nursing instructor, who are no longer at the college, reported that at least four of the women had gone on to become registered nurses and that the man was studying to become a registered nurse. The nursing instructor recently took a position at another college, but had no immediate plans to replicate the program there.

Information Source

Margaret Jensen
Victor Valley Counseling Center
15028 7th Street Suite 5
Victorville, CA 92392
(714) 245-4293

Displaced Homemakers—Community-Based Cooperation to Develop Services for Displaced Homemakers

Los Angeles Community College District, Valley College

Director: Sandra Burton

*Project No. 19-64741-2-0-010 (C) Cost: \$21,600
October 1, 1979 to September 30, 1980*

Project Overview

This project, and the project at Compton College described next, were designed to demonstrate the capability of a community-based organization, Career Planning Center, to serve as a resource for area community colleges in the recruitment of potential vocational education students from the ranks of displaced homemakers. Career Planning Center staff worked to strengthen linkages with EDD, the Department of Social Services, other community-based organizations, and Los Angeles Valley College. With the assistance of these agencies, applications were obtained from 400 women, 148 were enrolled in the program. Career Planning Center staff supplied these clients with career counseling and information about careers, the labor market, vocational training, and resume and job application preparation. A packet containing the Valley College catalog and other resource information for displaced homemakers was prepared and disseminated to 100 participants at two career planning workshops. Valley College administrators and counseling staff were introduced to the recruitment techniques in a series of informal inservice sessions.

Follow-Up Findings

A Valley College administrator reported that it was not possible to know what impact this project had at the college, because students who were referred to them were not identified when they enrolled. Nor was it known how the resource materials provided to counselors had been used by them. The Career Planning Center director said that staff were continuing to refer clients to the community colleges in the area, but felt that recruitment was not a priority at this time and that emphasis should be placed on providing placement assistance for individuals already enrolled in vocational programs.

Information Source

Eleanor Hoskins
Executive Director
Career Planning Center, Inc.
1623 S. La Cienega Boulevard
Los Angeles, CA 90023
(213) 938-5321

Displaced Homemakers—Career Planning Center, Inc. and Compton College

Compton Community College District

Director: Sandra Burton

*Project No. 19-64428-2-9-020 (C) Cost: \$7,317
August 15, 1979 to June 30, 1980*

Project Overview

In this project, as in the one described above, Career Planning Center, Inc., a community-based organization

with offices throughout Los Angeles, recruited displaced homemakers, assisted them with educational planning, and facilitated their enrollment in training programs, in this case at Compton College. Displaced homemakers were recruited with the cooperation of local offices of EDD. Services provided to clients by CPC included an orientation to vocational education opportunities, preparation of an Educational Development Plan (EDP), identifying appropriate Compton College classes for them to enroll in, and following up those who enrolled. Training was also provided to college personnel in administering the EDP process. By June 1980, a total of 67 women and three men were recruited, EDPs were developed for 67; 28 were enrolled in vocational education, and 16 were placed in jobs.

Follow-Up Findings

The woman who was the Career Center supervisor at Compton College and participated in the project was no longer there. The present supervisor said that displaced homemaker allocations are used to support counseling services for these re-entry students in the Career Center. An emphasis is placed on informing them about nontraditional careers, students have begun to enroll in nontraditional programs at the college in small, but increasing numbers.

Information Source

Dr. Frederick Lamm
Dean of Occupational Education
Compton College
1111 East Artesia Boulevard
Compton, CA 90221
(213) 637-2660

SUBPART 3

Local Research

Needs Assessment for Occupational Education Home Study Courses and Other Programs

Cerritos Community College District

Director: Richard E. Whiteman

*Project No. 19-64360-3-8-419 (C) Cost: \$13,400
October 1, 1978 to June 30, 1979*

Project Overview

In this project, a total of 2,266 persons, including a representative sample of students at Cerritos College, students at four adult schools and two regional occupational programs in the Cerritos Community College District, and members of the community at large, were surveyed to evaluate the current delivery systems for occupational education in the Cerritos District and to assess the need for new, expanded, and updated methods of vocational training. Responses were analyzed and recommendations were made related to on-the-job training programs, open entry/open exit classes, shorter programs, experiential education, satellite locations, independent home studies, computerized learning, a central information center, career counseling, self-employment opportunities, and training for nontraditional occupations. Training needed for upgrading on the

job and suggestions for course offerings were also reported. The project report was disseminated to post-secondary educators involved in the study and made available as a model to all community colleges in the state.

Follow-Up Findings

The needs assessment showed community interest in home study, but a home studies program was not developed because the college already offered a large independent studies program. Finance was also a factor in this decision. Other results of the needs assessment have been used to plan and improve curriculum, plan VEA projects, and to develop inservice opportunities for staff. The findings have been used as justification for the purchase of equipment to upgrade instruction which would not have been purchased without this documented information. Some impact was also reported on services for women, which were improved with the support of the assessment.

Information Source

Keith Adams
Assistant Dean of Vocational Education
Cerritos College
11110 East Alondra Boulevard
Norwalk, CA 90650
(213) 860 2451

Identification of Curriculum for New and Emerging Occupations: A Model System

Orange County Department of Education

Director Judith Scott

Project No 30-10306-3-8-842 (J) Cost: \$15,288
September 1, 1978 to June 30, 1979

Project Overview

In this project, educators, employers, and agency representatives in Orange County participated as resources in a study of new and emerging occupations in the county. Seventeen new and emerging occupations were tentatively identified which met three criteria. (1) the occupation did not appear in the *Dictionary of Occupational Titles*, (2) there was a demand for the occupation, and (3) existing vocational programs did not train students for the occupation. Ten of the occupations were discarded later, and job descriptions and a list of competencies required for employment were developed for seven: public safety assistant, career guidance technician, leisure counselor, word processing/reprographic specialist, word processing supervisor, solar installer, and fast food service unit supervisor. This information was disseminated to vocational administrators and educators in Orange County.

Follow-Up Findings

Individuals responsible for managing this project were no longer employed by the Orange County Office of Education and could not be reached for a follow-up interview. However, an Orange County community college instructor who was involved in researching the word processing field was contacted. She indicated that the experience helped her prepare curriculum for a word processing program that was in line with industry needs. She was planning to contact employers again and update the research in this field during

a sabbatical in 1981-82. It appears likely that other community college instructors involved in the project may have benefited in the same way, but no other testimony was obtained.

Information Source

Joyce Arntson
Business Center
Saddleback College, North Campus
5500 Irvine Center Drive
Irvine, CA 92714
(714) 559-9300

Exemplary and Innovative Programs

Establishment of Exemplary Energy Related Programs

Monterey Peninsula College

Director: Dr. Philip Nash

Project No. 27-66100-3-9-251 (C) \$43,813
July 1, 1979 to September 30, 1980

Project Overview

A model program to train solar mechanics and technicians was implemented at Monterey Peninsula College. The program was supported in part with CETA funds, which were used to purchase supplies and to pay 30 CETA-eligible students who enrolled in the 40 hours per week, two semester course. A total of 47 students participated; 21 completed the program and were certified, and 13 were employed immediately. Resident workshops for a total of 92 community college educators were held in August 1979 at Monterey Peninsula College and in August 1980 at the University of California, Santa Cruz. The first workshop featured hands-on experience in solar construction; the second covered energy curriculum and exemplary energy programs. Project staff researched and published an energy bibliography and a *1980 Syllabus of Energy Conservation and Alternate Energy Courses and Curriculum Offered in California Community Colleges*. The syllabus was mailed to all California community colleges. Copies of the *Solar Installer Training Program*, the curriculum developed by the governor's Office of Appropriate Technology, were purchased with project funds and sent to each community college in the state.

Follow-Up Findings

Since the project ended, the exemplary training program for energy technicians has been streamlined into a 360-hour course and modified to accommodate the changing job market in this field. Approximately 15 CETA students are trained in each 12-week course. Graduates have been placed with 20 local solar installation companies. In addition to the CETA program, in 1982 the college offered an introduction to solar technology course, an energy audit course, and courses related to building codes and energy conservation in residences. All of the energy program instructors contacted at other colleges during follow-up site visits had visited the Monterey Peninsula College program, or were using materials prepared by the project, or had contacted the director for advice in planning their programs.

Information Source:

Dr. Philip Nash
Associate Dean of Instruction
Monterey Peninsula College
980 Fremont Boulevard
Monterey, CA 93940
(408) 646-4035

Cooperative Student Placement Service

Santa Clara County Superintendent of Schools

Director: George Pratte

Project No. 43-10439-3-8-832 (J) Cost: \$5,789
April 1, 1978 to September 30, 1978

Project Overview

This project was funded to provide a job placement service to high school, community college, and regional occupational program (ROP) students in Southern Santa Clara County within the Gavilan Community College District service area. Gilroy Unified, San Benito Joint Unified, Santa Clara ROP, Gavilan College, and EDD participated until September 1978, when the joint project was terminated, chiefly due to Proposition 13 cutbacks. Prior to this, 160 placements had been arranged. Workshops on the service were presented at the annual convention of the California Association of Regional Occupational Centers and Programs in 1978. Interest which had developed in the project apparently dissipated after the passage of Proposition 13, and no further dissemination occurred after June 1978.

Follow-Up Findings

When other agencies withdrew from the project, Gavilan College continued to maintain the placement office, which is still known as the Cooperative Student Placement Service. One full-time staff person took 453 job orders and 362 student applications in 1980-81; 168 placements were made. The placement officer also handles the paperwork for work experience placements, makes job interview appointments, and follows up students who go for interviews, but is not able to handle job development. It was reported that employers in the area use this service in preference to the local EDD office.

Information Source

James Wolfsberger
Director of Occupational Education
Gavilan College
5055 Santa Teresa Boulevard
Gilroy, CA 95020
(408) 847-1400

Curriculum Development

Electronics Curriculum Development

San Mateo Community College District, College of San Mateo

Director: Jim Petromilli

Project No. 41-69054-3-9-352 (J) Cost: \$11,250
February 1, 1979 to June 30, 1980

Project Overview

This project resulted in the development of a list of 53 basic skills and 18 curriculum modules for training entry-

level electronics technicians at the College of San Mateo. The curriculum modules included materials adapted and developed for the project; audiovisual materials (videotapes, filmstrips, slide-tapes) were used extensively. The curriculum outline was delivered to the Chancellor's Office, but the complete curriculum was available only at the college, where instructors planned to refine it further.

Follow-Up Findings

While very little use had been made of the curriculum as developed, the project experience was cited in an application for a California Worksite Education and Training Act (CWETA) grant. The college was awarded a total of \$2.4 million to develop a program for training entry-level electronics workers and for upgrading experienced workers. By 1982, state-of-the-art instructional media, including computer-controlled interactive videotape modules, were in use in the open entry/open exit self-paced program at the college and at 14 industry sites. Four electronics courses had been developed and about 200 people trained midway through the four-year CWETA project. Plans were being implemented also to utilize the same instructional technology in computer assisted drafting, numerical control machine tool, and technical arts and drafting programs at the college by 1984. Demonstrations of the CWETA electronics lab work stations were conducted at least once a month.

Information Source

Dr. Sanford Gum
Director, Technology Division
College of San Mateo
1700 West Hillsdale Boulevard
San Mateo, CA 94402
(415) 574-6128

Project Open Shop

Antelope Valley Community College District

Director: Frank Roberts

Project No. 19-64253-3-8-458 (C) Cost: \$9,724
March 31, 1979 to June 30, 1979

Project Overview

This was the first year of a two-year project to develop an open entry/open exit course of instruction in basic welding and introductory auto technology. Expected outcomes included a marriage of individualized instruction and the lecture/lab mode, a decrease in underutilization of existing facilities, development of competency-based modules covering difficult areas of the program, and development of basic skills materials for students with special needs.

Follow-Up Findings

Project Open Shop was funded again in 1979-80 with \$13,000 in Subpart 3 funds. The self-instruction materials were completed and housed in the auto shop and welding areas. In March 1982, instructors reported that students used the materials frequently to review course content, catch up on material they had missed, or learn about advanced topics that were not covered in the class. Student retention had improved in these classes, but the utilization of the facilities had not increased as expected, perhaps because students at the college were unaccustomed to using

the open entry option. The electronics instructor considered the open shop instruction method so effective that he developed similar materials for self-instruction in electronics.

Information Source

Frank Roberts
Dean, Technical Education
Antelope Valley College
3041 West Avenue K
Lancaster, CA 93534
(805) 943-3241

A Model Bilingual Medical/Dental Receptionist Program

San Francisco Community College District, Mission Community College Center

Director: Mario Barrios

Project No. 38-73536-3-8-443 (C) Cost: \$24,888
February 1, 1978 to February 1, 1979

Project Overview

In this project, curriculum was developed for a model medical/dental clerical program for bilingual Latino students. The curriculum was delivered to the Chancellor's Office in the fall of 1979.

Follow-Up Findings

Use of the curriculum has been continued at the Mission Community College Center. Approximately 30 to 40 Latino students were reported to be trained and placed each year. The six-month program includes typing, business English, office procedures, and medical and dental terminology. To enter the program, students must be capable, serious, motivated, and able to read English at the sixth grade level. The program director does not consider the curriculum appropriate for use with typical Spanish speaking students found in most California communities, however, it appeared that some of the curriculum materials in Spanish and English could be adapted for use with Hispanics in other contexts. Information about the program had been sent to several requesting institutions in Michigan, Texas, Southern California, and in Oakland.

Information Source

Dr. Carlota del Portilla
Mission Community College Center
160 South Van Ness
San Francisco, CA 94103
(415) 863-3887

Project EXCITE (Curriculum for Maintenance Technicians)

Santa Clara County Superintendent of Schools

Director: Glenn Vaughan

Project No. 43-10429-3-8-833 (J) Cost: \$36,654
April 1, 1978 to June 30, 1979

Project Overview

In this project, curriculum materials were developed for training maintenance technicians in regional vocational center and community college programs. The project activities included task analysis, training planners and

advisory committee members at the San Jose Regional Center and San Jose City College to develop curriculum for maintenance occupations instruction, developing and testing curriculum materials for nine maintenance technician areas, and developing a prototype guidance component on videodisc. Information about the curriculum materials was mailed to all community colleges and regional vocational centers in the state. Twenty-four sets of the materials were sent out in response to requests.

Follow-Up Findings

The Project EXCITE director, who had moved to Southern California and was no longer employed in education, believed that project activities were not continued after the project funding ended and could not report any lasting impact on community college education.

Information Source

Glenn Vaughan
Computer Post of San Diego
6904 Miramar Road Suite 201
San Diego, CA 92121
(714) 695-2000

Vocational Guidance and Counseling

Career Planning Services for Feeder High Schools

Peralta Community College District, Vista College

Director: Lynn Whitmore

Project No. 01-61267-3-8-910 (J) Cost: \$30,586
March 1, 1978 to June 30, 1979

Project Overview

The purpose of this project was to operate a comprehensive career planning service for high school youth and their parents in selected high schools in the San Francisco East Bay Area. Career inventory materials and other career information were provided to the participating high schools. Representatives from ten local high schools were introduced to career education activities and informed about local resources at a career development workshop. A career center was established at Albany High School, and instructors at Emeryville High School were trained to infuse career-oriented activities into their curriculums. Project staff compiled a *Peralta Occupational Guide* and a *Career Planning Guide*, which they distributed to high school counselors in the district.

Follow-Up Findings

In the period since the project ended, the career center at Albany High School has been enlarged and new counseling materials have been acquired. A EUREKA terminal was installed with School Improvement Program funds. A woman who is certified both as a teacher and as a counselor manages the center. Enrollments in the Peralta Colleges from the city of Albany increased nearly 29% in 1978-79 and over 5% in 1979-80, but this increase is not necessarily a result of the VEA project. At Everyville High, only two or three of the ten teachers who participated in the training have continued to use career infusion activities introduced to them in the project.

Information Source

Lynn Whitmore
Vista College
2020 Milvia Street
Berkeley, CA 94704
(415) 841-8431

A Personal Development Guidance Program Using Small-Group Learning

Mt. San Jacinto Community College District

Director: Hilding Nelson

Project No. 33-67213-3-8-400 (C) Cost: \$50,139
February 1, 1978 to June 30, 1979

Project Overview

This project was designed to improve the learning and personal growth of occupational students in community colleges by using a small-group learning model. A model was developed and tested which involved training instructors and student "facilitators" (small group leaders) in a series of four workshops. The model was tested successfully in nursing, business education, and basic English and mathematics classes. Project products included a facilitator training workshop syllabus for the four workshops, a program coordinator's guide, an instructor's facilitation guide, and a facilitation brochure. These were mailed to all California community college presidents and superintendents. An information brochure was also sent to approximately 930 community colleges nationwide.

Follow-Up Findings

The use of small-group instruction to improve the goal selections and training successes of students has been continued at the college. Other colleges in the area were reported to be interested in the program and/or to have adopted this approach for improving learning.

Information Source

Del Barnett
Mt. San Jacinto College
21-400 Highway 79
San Jacinto, CA 92383
(714) 654-8011

A Model Vocational Guidance and Counseling Program for Evening and Weekend Students

Sierra Joint Community College District

Director: Lewis Camillucci

Project No. 31-66936-3-9-551 (J) Cost: \$9,600
May 1, 1979 to June 30, 1980

Project Overview

The purpose of this project was to develop a model for providing vocational guidance services for evening and weekend students at the community college level. A total of nine surveys, including surveys of 200 evening students and 60 staff members at Sierra College, were used to study the needs of weekend and evening students for guidance services and how these might be met. Identified needs were prioritized and proposals were solicited for activities to meet them. An advisory committee assisted project staff

select seven proposals for implementation; these "mini-projects" resulted in upgraded career center materials, career guidance workshops, and a model for training evening college staff in the use of the career center. A comprehensive manual, *Guide to Developing an Evening and Weekend Vocational Counseling and Guidance Services Program*, was published and sent to all California community colleges.

Follow-Up Findings

The former co-director of the project reported that an expansion of the guidance services for evening students was begun at Sierra College, but with severe budget cuts, this was one of the first areas to go. Some limited services were offered in the fall of 1982 with "bootlegged" time. The co-director believed that little use had been made of the manual at other colleges, as there had been no inservice training or other personal contact between project staff and recipients. This was confirmed by individuals interviewed during site visits who had received the manual, but had not used the information.

Information Source

Eileen Dickson
Director of Student Special Services
Sierra College
5000 Rocklin Road
Rocklin, CA 95677
(916) 624-3333

Bay Area Cooperative Education Clearinghouse (BACEC)

Foothill-DeAnza Community College District

Director: Pat Hill Hubbard

Project No. 43-69443-3-8-915 (J) Cost: \$72,880
January 1, 1978 to June 30, 1979

Project Overview

This was the third year of a four-year effort supported with vocational education project funds, and funds and management staff from the Industry Education Council of California. The Bay Area Cooperative Education Clearinghouse (BACEC) placed students from six Santa Clara County community colleges in work experience and cooperative education positions. In this funding period, BACEC offices were staffed at DeAnza, Foothill, West Valley, Mission, San Jose City, and Evergreen Valley Colleges. Using a computerized data bank and a computer search and match system, BACEC staff processed 3,771 student profiles, listed 4,987 work experience positions, and made 815 placements. An active working relationship was developed with 2,500 Santa Clara Valley employers. Eighteen on-campus workshops were conducted on career-related topics, and a two-day workshop that included site visits to industries was offered for counselors.

Follow-Up Findings

BACEC received an additional \$87,000 from the Chancellor's Office in 1979-80. During this year, BACEC staff processed 2,189 student profiles, developed 3,931 new work experience positions, made 598 placements, gave 30 on-campus and three off-campus workshops for students,

presented a field experience workshop for 21 counselors, and implemented a new electronics work experience component. The project was considered highly successful by its administrator, who believes that the cooperative image BACE staff projected to the industrial community on the behalf of the community colleges has had some positive long-lasting effects.

When the VEA funding expired in June 1980, there was insufficient support from the colleges involved to continue the service. In addition to the issue of funding, college personnel interviewed on two of the campuses indicated that there were still problems in the system operation to be eliminated, such as the long turnaround time for making placements. They felt that a system tailored more to the needs of individual colleges would have been more acceptable. There was also reluctance on the part of work experience coordinators to give up job slots they had developed to a centralized operation. The outcomes of this project were symptomatic of many of the needs faced by community colleges within a region as they address the concerns of employers and students they serve: the need for leadership, the need to respond quickly to new requirements of employers, and the need to eliminate duplication of effort through regional approaches to providing services, while at the same time maintaining the autonomy of individual colleges.

Information Source

Pat Hill Hubbard
American Electronics Association
P.O. Box 11036
Palo Alto, CA 94302
(415) 857 9300

The Mid-Life Career Redirection Center

Chaffey Community College District

Director: Martin Gerstein

Project No. 36-67660-3-8-406 (C) Cost. \$70,290
April 1, 1978 to June 30, 1979

Project Overview

This grant funded the design and implementation of a mid-life career redirection center for out-of-school adults between the ages of 30 and 55. A total of 1,105 persons participated in the various classes and other activities sponsored by the project. These included career redirection groups which met weekly for eight weeks and developed individual vocational plans, and classes in subjects such as values clarification, goal setting, assertion training, and adult sexual issues. A publication, *Career Direction and Redirection for Adults. A Handbook for Establishing an Adult Vocational Guidance Center in the Community College*, was prepared and disseminated to community colleges statewide. A survey of 20 colleges was conducted which indicated a need for an employment training program for specialists in adult development. Consequently, a report on the desirability, feasibility, and constraints of developing such a curriculum was prepared and disseminated to local and regional community colleges and four-year institutions.

Follow-Up Findings

An application for continued funding of the project was denied. The project director and counselor were no longer at the college in November 1981. The associate dean of instructional services said that no trace of the project remained at the college.

Information Source

Leonard Martyns
Associate Dean, Instructional Services
Chaffey College
5885 Haven Avenue
Alta Loma, CA 91701
(714) 987-1737

Gender Equity

A Model Project to Reduce Sex Barriers in Vocational Education

Los Angeles Community College District, Pierce College

Director: Carol Rookstool

Project No. 19-64741-3-9-654 (J) Cost. \$32,548
May 1, 1979 to June 30, 1980

Project Overview

The purpose of this project was to develop a model program to eliminate sex bias and stereotyping in vocational programs, and to encourage students to enroll in occupational programs nontraditional to their sex. Classes in six vocational departments at Pierce College were selected as target classes. These included classes in the agriculture, computer science, electronics, and industrial arts areas that were imbalanced for women, and classes in business administration and office administration that were imbalanced for men. Project staff provided the target classes with special awareness activities, recruitment tools, and, for industrial arts, a handbook which the instructor adopted as a text. Increases in female enrollments occurred in the female imbalanced classes, but there were no increases in the male enrollments in the male imbalanced classes within the time-span of the project. Other activities tested for the model program were awareness workshops for counselors and instructors, workshops on careers for students, career exploration visits, and presentations at orientations for new students and to occupational classes. A report, *SEEK, A Model Project to Reduce Sex Barriers in Vocational Education*, was sent to all California community colleges.

Follow-Up Findings

Efforts to improve gender equity in the targeted vocational areas have been continued. Allocated VEA funds have been used to support staff development activities, follow-up of nontraditional students who drop out, and preparation of career information, recruitment materials, and curriculum materials. Enrollment statistics have been closely monitored. Enrollments of women in electronics, computer science, and industrial education classes have continued to increase. Two years after the project ended, women in electronics are training for jobs as technicians, rather than assemblers. Fewer women are taking traditional business courses, as they have been encouraged to go into

higher-paying areas. There have been little or no increases of males training for jobs in office occupations, due in part to the perceived low salaries. The occupational dean, support staff, and instructors involved should be commended for their continuing efforts to encourage nontraditional students to enroll in their programs and for the support they provide to those who do.

Information Source

Don Love
Assistant Dean of Instruction, Occupational Education
Los Angeles Pierce College
6201 Winnetka Avenue
Woodland Hills, CA 91371
(213) 347-0551

Recruiting and Training Tradeswomen as Occupational Teachers

San Jose Community College District

Director: Sue Cobble

Project No. 43-69658-3-9-651 (J) Cost: \$15,700
March 1, 1979 to June 30, 1980

Project Overview

The purpose of this project was to increase the number of women teaching apprenticeship training programs and other occupational programs nontraditional to their sex, who can act as role models for women entering these programs. The teacher training program was publicized extensively in the San Francisco Bay Area, over 160 prospective recruits were interviewed and 40 tradeswomen were selected for the program. They were scheduled into "Techniques of Teaching" or "Phase I" classes presented by University of California Extension at several locations in the Bay Area. The project reimbursed the women for expenses related to the training and credentialing. Nineteen tradeswomen completed the "Techniques of Teaching" class and became eligible for the limited service credential, 17 others completed the "Phase I" class and became eligible for the full-time instructor credential. When the project terminated, 16 graduates had obtained credentials and ten women had been placed in teaching positions as instructors of nontraditional subjects, including welding, auto technology, carpentry, machine technology, industrial maintenance, wood-working, cabinet making, and printing. A report, *Role Models in the Classroom: A Handbook for Recruiting and Training Journeywomen as Trade Teachers*, was prepared and sent to all California community colleges and other educational institutions which offer apprenticeship training.

Follow-Up Findings

The project director contacted 34 of the 36 women six months after the project ended, four more women had found jobs teaching their trades. During the 1981-82 school year, at least ten of the women were still employed in community colleges in Bay Area counties, teaching welding, auto technology, carpentry, machine technology, wood-working, ornamental horticulture, electrical trades, and industrial maintenance. Administrators contacted in the impact study agreed that these instructors encouraged participation of women and improved their retention in classes

nontraditional for their sex. The original project served as a model for a Subpart 2 support services for women project in the Long Beach Community College District in 1980-81. Sixteen tradeswomen completed the 60-hour "Techniques of Teaching" class in this program.

Information Source

Sue Cobble
Coordinator, Labor Studies
San Francisco Community College District
33 Gough Street
San Francisco, CA 94103
(415) 239-3090

Disadvantaged

Recruitment and Retention of Disadvantaged Students (New Horizons)

Rancho Santiago Community College District, Santa Ana College

Director: Donna Farmer

Project No. 30-66688-3-8-426 (C) Cost: \$68,903
August 1, 1978 to September 30, 1979

Project Overview

The New Horizons project was initiated in 1978-79 to assist disadvantaged students in achieving educational success at Santa Ana College. Activities included a program of community outreach in which over 2,600 contacts were made, special orientation sessions and counseling at registration to facilitate the entry of disadvantaged students into vocational programs, training of peer counselors, counseling and referral of students, and additional counseling for students with midterm grades below 2.0. In the spring semester, 214 students completed their programs; the drop rate was 16%, half the school average. The between-semester drop rate was 9%, as compared to the college average of 46%. Over 90% of the participating students earned a 2.0 grade point average or better.

Follow-Up Findings

When the VEA grant expired, the New Horizons director proposed a five-point expansion of the program. Her proposal was approved and New Horizons was awarded \$170,000 in district VEA funds to extend services to include tutoring, assessment of prior learning, and support services for displaced homemakers and nontraditional students. The project was moved from a temporary bungalow onto the first floor of the new student center. In 1980-81, counseling, workshops, and related services were provided for over 6,000 adult re-entry students, 859 displaced homemakers, and 2,671 nontraditional students. The project continued to serve 1,677 academically disadvantaged students with vocational guidance services, and provided instructional support for 3,020 students. Most recently services have been extended to senior citizens. Over 625 had been served by the end of 1981. In 1981-82, New Horizons staff had grown to six full-time and 20 part-time positions, including counselors, peer advisors, bilingual tutors, and instructional aides. The program now enjoys the sincere cooperation, participation, and support of the college faculty

and regular counseling staff, and is considered an integral part of campus services. Representatives of approximately 15 to 20 colleges visit New Horizons annually, and the project director had consulted with at least five colleges in the area that were interested in modeling programs after New Horizons.

Information Source

Diane Van Hook
Director, New Horizons
Santa Ana College
17th Street at Bristol
Santa Ana, CA 92706
(714) 667-3000

California Youth Alternatives Project: San Bernardino Site

*San Bernardino County Superintendent of Schools
Directors: Art Smith, Robert Ciauri*

*Project No. 36-10363-3-8-204 (I) Cost: \$20,275
January 12, 1978 to June 30, 1979*

*Project No. 36-10363 3-9-701 (I) Cost: \$19,579
October 1, 1978 to December 31, 1979*

Project Overview

In January 1978, the San Bernardino County Superintendent of Schools received VEA and CETA funds to design a model for placing vocational education students in jobs. A model placement service adaptable to a variety of local conditions was designed and described in writing. Communication lines were established between EDD, the Department of Rehabilitation, secondary school districts, county school offices, and community colleges at three demonstration sites. Representatives of these agencies agreed that a workable placement process could be implemented in each site using personnel and processes described in the model, but implementation of this design was not funded.

Instead, the project objectives were revised and in October 1978, the project received funding as one of five sites of the California Youth Alternatives Project. CYAP was a demonstration program involving interagency cooperation in provision of recruitment, testing, counseling, basic skills and vocational training, paid work experience, and job placement for targeted groups of disadvantaged students. The San Bernardino CYAP project served 78 unemployed young adults, ages 18 to 22, who were disadvantaged and who lacked high school diplomas. Most of the participants were recruited through the San Bernardino Valley College EOPS program, which provided disadvantaged youth with basic skills training leading to a GED. Fifty-five of these youth participated in career exploration activities and developed basic employability plans specifying actions and education required to accomplish their goals. Instruction was available at San Bernardino Valley College and other training programs in the community. Before the project terminated, 21 participants were placed in unsubsidized private sector jobs and there were 34 other positive terminations.

Follow-Up Findings

The CYAP model was not adopted in San Bernardino County and students in the program were transferred to the county's CETA program when VEA funding ended. Former project staff reported that the project opened lines of positive communication between them and the EOPS offices at Crafton Hills and San Bernardino Valley Colleges. In 1982, a project similar to the CYAP project was funded by the local Industry Education Council which would also utilize the EOPS contacts. Staff believed the existing linkages established in the earlier project would help to increase the effectiveness of the new project.

Information Source

Robert Ciauri
Coordinator, Guidance and Career Education
San Bernardino County ROP
602 South Tippecanoe Avenue
San Bernardino, CA 92415
(714) 383-1352

A Program to Strengthen the Reading and Writing Skills of Vocational Students

Contra Costa Community College District, Los Medanos College

Director: Charles Collins

*Project No. 07-61689-3-8-457 (C) Cost: \$28,730
February 1, 1978 to June 30, 1979*

Project Overview

This was the first year of a two-year VEA project for improving reading and writing skills of vocational students at Los Medanos College through cooperation between language arts and vocational instructors. Reading and writing tests tailored to the vocabulary and subject matter of various career fields were developed and administered. Students who registered low on these tests were referred by the vocational instructors to a reading/writing workshop. A total of 53 students were served; students and instructors who were involved agreed that the program had a positive impact on the students, particularly the tutoring component.

Follow-Up Findings

The project was continued in 1979-80 under another Subpart 3 grant for \$18,416. In this period, emphasis was placed on the use of tutors in vocational classrooms. Tutoring was provided to 165 students in the areas of welding, small engine repair, appliance repair, business, and child care, resulting in improved student retention in these areas. Three language arts instructors presented a two-hour, weekly staff development seminar each semester for a total of ten vocational instructors to prepare them to direct, supervise, and evaluate the tutors assigned to their students. In 1980-1982, with a grant from the Fund for the Improvement of Postsecondary Education, the vocational education tutoring program was expanded into a collegewide program. Staff development seminars were presented to all faculty to train them to teach reading skills along with course content. The college has hosted visitors interested in the program, and

was the conference site for the California Community College Tutorial Association in April 1982.

Information Source

Sandra Booher
Dean of Language Arts
Los Medanos College
2700 East Leland Drive
Pittsburg, CA 94565
(415) 439-2181

Basic Skills Curriculum for Disadvantaged and Limited-English Speaking Vocational Students

West Valley Community College District, Mission College

Director: Dr. Candy Rose

Project No. 43-69716-3-9-726 (J) Cost: \$11,988

May 1, 1979 to June 30, 1980

Project Overview

The purpose of this project was to develop curriculum materials to improve the reading, writing, computational, and job preparedness skills of disadvantaged and limited-English speaking students in vocational education. An interest inventory in basic skills was developed and administered to 700 vocational students to learn what they believed their needs were in reading, writing, mathematics, and speaking and listening skills. Vocational faculty were also surveyed to determine the levels of basic skills they required in their programs and where they thought students were deficient. Two thousand students were tested for basic skills in the fall of 1979 prior to being placed in classes at the appropriate levels. Based on the survey and test results, a new course in technical mathematics was developed; curriculum units in mathematics, writing, and medical terminology were prepared for the nursing program; a new course, "Conversational Skills for the Non-Native Speaker," was offered; materials were developed to teach job preparedness skills; and sample math modules were created and tested for computer assisted instruction. A remedial English unit was also developed for use in industry with ESL employees, many of whom were expected to take classes later at the college.

Follow-Up Findings

Practices developed under project funding—diagnostic testing of entering students, identification of requirements for basic skills in occupational classes, and incorporation of basic skills instruction into the vocational curriculum—have been continued through a team approach involving counselors, basic skills instructors, and vocational instructors. One result has been improved student retention; for example, the dropout rate in electronics has decreased by about 50% since the program of testing and basic skills upgrading was implemented. Vocational faculty were said to be better able to integrate basic skills instruction into their course content, and both the vocational and academic faculties have a better understanding and appreciation of each others' roles. The project enabled staff to implement a college policy of integrating occupational and basic skills instruction: the president expects to extend this practice to transfer courses.

Information Source

Dr. Candy Rose
President
Mission College
3000 Mission College Boulevard
Santa Clara, CA 95054
(408) 988-2200

Technical Language Skills Development in Reading and Writing

San Mateo Community College District, College of San Mateo

Director: Dr. Adrian Cohn

Project No. 41-69054-3-9-727 (J) Cost: \$30,802

May 1, 1979 to June 30, 1980

Project Overview

This project explored procedures for developing the language skills of vocational students to make them effective communicators in the classroom and on the job. A Technical Skills Language Center was set up in a building near the vocational/technical building on the College of San Mateo campus. The vocational faculty were consulted about language skills required in their classes. They also advised the three language arts faculty members who staffed the Language Center about the content of eight special language skills manuals they wrote for welding, nursing, technical arts and graphics, drafting, electronics, business, and administration of justice programs and for ESL students. Over 400 students were assisted at the Language Center, where the Garrison method of one-to-one instruction was used during 20-minute appointments. Post-tests of a sample of these clients showed an improvement of 1.3 grade levels in three months. In the spring of 1980, a floating satellite center was established in the vocational/technical area, and four sections of "Writing for Industry" were sponsored by the project. Sets of the eight language skills manuals were delivered to the Chancellor's Office.

Follow-Up Findings

The Language Center continued to operate without project funds, but the hours were cut back to 20 per week, less than half the time available during the project. Nonetheless, over 5,000 student contacts were made in 1980-81, including over 2,000 scheduled appointments. Of the students served, 71 % were vocational students. The Center also provided facilities and personnel to assist students in the CWETA electronics program (see page 67) in preparing resumes and letters of application. The "Writing for Industry" class is offered each semester. The skills development program continues to rely exclusively on language arts instructors and one instructional aide to provide one-to-one assistance: tutors, mechanical aids, and group instruction have not been used. The workbook materials developed for the program were shared with project personnel planning similar basic skills improvement programs at three Southern California community colleges, but rather than adopt these materials, instructors at the three sites elected to develop their own.

Information Source

Dr. Adrian Cohn
Language Arts
College of San Mateo
1700 West Hillsdale Boulevard
San Mateo, CA 94402
(415) 574-6436

Early Recognition of Disadvantaged Students (ERDS)

San Jose Community College District, San Jose City College
Director: C. C. Norment
Project No. 43-69658-3-8-415 (C) Cost: \$19,383
March 15, 1978 to June 30, 1979

Project Overview

The objectives of this project were to improve instructors' understanding of the definition of "disadvantaged student," to develop and use methods for early recognition of disadvantaged students, and to increase enrollments and completions of disadvantaged students and women in targeted occupational courses. A two-day workshop was presented for 24 counselors and instructors on the identification of disadvantaged students; most of the participating instructors developed and used pre-tests to help identify educationally disadvantaged students in their classes. A counselor aide was hired to assist instructors in tracking student progress. Referrals to SAM-CHALUI, the accounting system used for special needs students, were increased over 200%. There was a small increase (1.8% average) in the percentage of women completing the eight pilot classes. A report was prepared for presentation at the spring 1979 conference of occupational deans, and San Jose City College staff offered to assist other LEAs survey their instructors and counselors to determine the need for a training workshop to heighten their awareness of disadvantaged students and how to identify them.

Follow-Up Findings

After instructors and counselors had been trained to identify disadvantaged students, project activities were continued at the college at a reduced level. Participating instructors are said to appear more sensitive to the needs of various special students. Several instructor-oriented activities have evolved. There is somewhat greater acceptance and use of formal and informal classroom testing, instructor use of special aides, and cooperative use of special support services. Acceptance and processing of instructor referrals of disadvantaged students by means of SAM-CHALUI has continued. More disadvantaged students are identified, counseled, and referred to the necessary special support services than were prior to the project.

Information Source

Dr. Greg Ohannesson
Assistant Dean of Occupational Education
San Jose City College
2100 Moorpark Avenue
San Jose, CA 95128
(408) 298-2181

Handicapped

A Machine Tool Technology Program Accessible to the Physically Handicapped

South County Community College District, Chabot College
Director: Robert Brown
Project No. 01-61317-3-8-439 (C) Cost: \$51,601
March 1, 1978 to June 30, 1979

Project Overview

This project resulted in the development of curriculum for a program at Chabot College in numerical control programming and machine operation that is accessible to physically handicapped students. The approach to mainstreaming used at Chabot stresses adapting the disabled person to the environment, rather than adapting the environment to the person. Equipment and strategies for achieving accessibility for individuals with a variety of handicapping conditions were developed and used.

Follow-Up Findings

In 1979-80, the college received another Subpart 3 grant of \$7,500 which supported dissemination of the curriculum. A report was prepared and over 600 copies were distributed in inservice sessions presented statewide and in response to special requests. The elevating wheelchair, which was used to enable wheelchair-bound students to reach machine shop equipment, was featured in the film, "A New Day," produced by the Los Angeles Community College District. At Chabot College, the project director was made head of the technical division and proceeded to make all areas there accessible to the handicapped. An important part of his effort is to keep programs current in regard to computer applications which open new doors to employment for the physically handicapped. Approximately 25 disabled students have been enrolled in the numerical control program in the last three years; all seven program completers were employed in April 1982. Other outcomes reported were closer relationships between vocational faculty and enablers, improved retention of handicapped students, and closer relationships with industries contacted in the project. Personnel from other colleges continue to request information and visit the program.

Information Source

Robert Brown
Chairman, Engineering Technology
Chabot College
25555 Hesperian Boulevard
Hayward, CA 94545
(415) 786-6944

A Vocational Assessment System and Cooperative Work Experience Model for Disabled Students

Peralta Community College District, Vista College
Director: David Hans
Project No. 01-61267-3-8-448 (C) Cost: \$72,600
March 1, 1978 to June 30, 1979

Project Overview

In this first year of a three-year project, counseling was provided to 164 disabled persons; 35 clients were placed in

appropriate vocational training, such as data processing, grounds maintenance, janitorial, horticulture, welding, and word processing. Fifteen cooperative work experience sites were developed and 33 people with disabilities were enrolled in cooperative work experience education. On-the-job support was provided to employers and students to help students succeed, and a class entitled "Job Retention Skills for the Disabled" was offered.

Follow-Up Findings

Development of the model program was continued through June 1981 with two additional Subpart 3 grants totaling \$159,042. An innovative approach used in the model was to begin with conditional job offers from a specific employer, and then work backward to establish the necessary training standards, admission requirements, assessment activities, recruitment procedures, and intensive training activities designed specifically for disabled students. A total of 172 students were placed in jobs in the three project years. The program received excellent support from union representatives, who publicized it nationwide. As a result of the project, an ordinance establishing a commission on disabled persons was passed by the Oakland City Council. In the last year of funding, a publication describing the model, *Joining the Ranks—Partnership in Rehabilitation*, was prepared and mailed to community colleges statewide. Unfortunately, because funding approval was delayed that year, planned inservice activities to disseminate the model were not conducted; no evidence of adoption of the exemplary program was found. After project funding ended, the program was continued at Vista College, however, students were not actively recruited and no statistics were available on participation.

Information Source

Maureen Knightly
Vista College
2020 Milvia Street
Berkeley, CA 94704
(415) 841-8431

A Study of Word Processing Competencies With Implications for Training Handicapped and Disadvantaged Students

Saddleback Community College District
Directors: Joyce Arntson, Donald Busche
Project No. 30-66654-3-8-425 (C) Cost: \$18,775
April 10, 1978 to June 30, 1979

Project Overview

In this study of word processing competencies, interviews were conducted with 72 persons in firms that use word processing. Interview objectives were to ascertain what tasks are performed, what competencies are required, what employment opportunities exist for the handicapped in word processing, how many handicapped are employed, and how the handicapped are recruited. Information from the research was collated, disseminated to 200 participants at a word processing conference, and used to begin adapting curriculum for use in the district.

Follow-Up Findings

The project resulted in modifications to the business education facilities on the Saddleback College South Campus and influenced the design of the new Business Center on the North Campus. Instruction in both laboratories is competency-based; classes are open entry/open exit. Multi-media materials have been developed to aid in the instruction of slow learners and students who do not learn best from textbooks or lectures. One-to-one instruction is provided by faculty, teacher aides, and advanced students. The up-to-date equipment in each lab includes special word processing equipment to assist in the instruction of visually impaired students. At the North Campus, equipment purchases have been justified through savings to the college realized by using the instructional process in the Business Center to perform campus office management and duplication functions. Instructional and equipment adaptations have been made as required to meet the needs of deaf students, a one-armed student, and other disabled students who enrolled. Staff believe the program attracts these students because they know they will be accommodated. Enrollments of all students in word processing have increased steadily, there is now a waiting list. The two business laboratories are visited frequently by people from other California community colleges and out-of-state.

Information Source

Joyce Arntson
Business Center
Saddleback College, North Campus
5500 Irvine Center Drive
Irvine, CA 92714
(714) 559-9300

SUBPART 5

Mini-Units in Parenthood Education

Sierra Joint Community College District
Director: Martin Jack
Project No. 31-66936-5-8-428 (C) Cost: \$14,955
March 15, 1978 to March 15, 1979

Project Overview

This project resulted in the production of three instructional resources for local use in campus programs in foods and nutrition, child and family relations, consumer education, and home management, and for use in the community by human service agencies, pre-schools, and day care homes. The products included a directory of child care services in Placer and Nevada Counties, a slide-tape presentation on the value of play in child development, and a handbook on basic nutrition for children. Copies were sent to local agencies and to the Chancellor's Office.

Follow-Up Findings

All of the products were reported to have had extensive use at Sierra College and in Placer and Nevada Counties. The directory of child care services, which was updated in 1980 with district funds, is distributed by realtors to new

residents of the area and used by community agencies to identify child care providers and appropriate members for advisory groups. The slide-tape presentation is used in college classes and in community outreach programs. The handbook, *What's So Hard About Feeding Kids?*, has been used as a resource in the college child care and parenting programs and by local pre-schools. The project coordinator believes that these resources have promoted good relations with the community. Also, by demonstrating the interest of staff in child development, the project may have helped the

college to obtain a Human Resources Development grant in 1979-80 for work in parenthood education.

Information Source

Bettye Nippert
Specialist, Consumer and Homemaking Education
Sierra College
5000 Rocklin Road
Rocklin, CA 95677
(916) 624-3333

STATEWIDE PERSONNEL TRAINING PROJECTS

PRESERVICE TRAINING

Single Subjects Credential

Competency-Based Preservice Teacher Education Program for Office and Distributive Education

California State University, Los Angeles

Director Dr. Wilmer Maedke

Project No. 19-30544-3-9-412 (1) Cost: \$22,892

March 1, 1979 to June 30, 1980

Project Overview

The purpose of this project was to develop and implement a competency-based office and distributive education preservice teacher training program at California State University, Los Angeles. Ten common core curriculum units were developed for the first quarter course for business education majors, and 11 modules were completed for the second quarter course. The modules were tested in a business education program at the university that featured pre-testing, individualized self-paced instruction using the modules, and post-testing, usually by demonstration of specific skills. The modules were to be provided to California State University, Fresno, and to San Francisco State University for use in preparing business education teachers there.

Follow-Up Findings

The development of the competency-based preservice curriculum was continued with VEA project funding in 1980-81, when modules were prepared for methods courses in specialized areas. A Center for Business Education was established at the university to provide preservice and inservice training. Subpart 3 funds were also used to support the adoption of the model program at San Francisco and Fresno, so that Centers for Business Education now exist in the Southern, Coastal, and Central regions of the state. Developers of the program believe the modularized, competency-based format has led to greater use of this instructional approach by program graduates, since "teachers teach as they were taught."

Information Source

Dr. Wilmer Maedke
Department of Business Education
California State University, Los Angeles
5151 State University Drive
Los Angeles, CA 90032
(213) 224-2916

Agriculture Preservice Education

Five teacher training institutions (see below)

Directors (see below)

Five grants (see numbers below) (1) Cost: \$23,352
July 1, 1978 to June 30, 1979

Five grants (see numbers below) (1) Cost: \$60,981
July 1, 1978 to June 30, 1979

Project Overview

Each year VEA project funds are awarded to the five agriculture teacher training institutions in California to pay

the excess costs of training agriculture teachers for placement in secondary schools and community colleges in the state. The funds are used to pay for sending teacher educators to visit student teachers at distant cooperating schools, and for providing stipends to students who can not take part-time jobs because of their heavy school loads. The teacher trainees are fifth year or graduate students who have been accepted into programs leading to the agriculture specialist credential. A total of approximately 150 teachers received credentials in this program in 1977-78 and 1978-79.

Follow-Up Findings

Funding for this purpose has been continued and subsidizes the training of around 75 new agriculture teachers each year. This supply of teachers is said to be necessary because of the number who leave the profession each year to enter industry. Agriculture teacher educators contend that the special support is a necessary incentive to attract and retain students in the teacher training program, and to ensure that they receive a high quality student teaching experience. Five practicing community college vocational agriculture educators who were interviewed during the impact study agreed with this contention; they also described from first hand experiences or observations the commitment to extra-curricular activities, as well as to teaching, required of the agriculture student teacher. The Chancellor's Office agriculture specialist and the head of the largest teacher training program pointed out that, while program graduates most often go into high school teaching first, at least half of the present community college agriculture teachers have high school teaching backgrounds and participated in the VEA subsidized training.

Information Sources

Project Nos. 7656 and 10-30593-3-9-401

Dr. Richard Rogers
School of Agricultural Sciences
California State University, Fresno
Fresno, CA 93740
(209) 294-2969

Project Nos. 7657 and 57-30023-3-9-404

Dr. James Leising
Department of Applied Behavioral Sciences
University of California, Davis
Davis, CA 95616
(916) 752-1808

Project Nos. 7658 and 40-30569-3-9-405

Dr. Larry Rathbun
Head, Agricultural Education
California Polytechnic State University
San Luis Obispo, CA 93407
(805) 546-2803

Project Nos. 7659 and 10-30577-3-9-402

Flint Freeman
School of Agricultural Sciences
California State Polytechnic University
3801 West Temple Avenue
Pomona, CA 91768
(714) 598-4152

Project Nos. 7660 and 04-30585-3-9-403
Dennis Hampton
Department of Animal Science, Agriculture Business,
Education, and Mechanics
California State University, Chico
Chico, CA 95926
(916) 895-5906

Designated Subjects Credential

A Statewide Vocational Education Teacher Credentialing Program

University of California Extension
Director: Robert B. Kindred
Project No. 19-30049-3-9-406 (J) Cost: \$59,580
October 19, 1978 to December 31, 1979

Project Overview

This is a continuing project that provides teacher training classes and related services to prepare experienced individuals from business, industry, agriculture, and government for teaching in vocational education. In this funding period, counseling and advisory services were provided in 3,921 contacts; personalized profiles were developed for 1,145 credential applicants; and teacher education classes were presented for 2,317 students, 44% of whom were teaching at the community college level. Of the 70 teacher educators who taught in the program, 57% were employed by community colleges. Other project activities included refinement of teacher training curriculum and occupational proficiency examinations, and inservice workshops for the teacher educators.

Follow-Up Findings

In 1979-80 and 1980-81, a total of over 2,500 additional community college teachers were trained in the University of California Extension program. In the three-year period, 1978 to 1981, 52% of the 7,377 teachers trained were preparing for teaching at this level. A follow-up study of 458 secondary and community college graduates and 50 administrators was conducted in 1980 by an associate professor of higher education at the University of Washington. His conclusion that "the program was developing the necessary teaching competencies on a statewide basis" was verified by former students and their administrators who were contacted during site visits in this impact study.²

Information Source

David Allen
University of California Extension
10962 Le Conte Avenue
Los Angeles, CA 90024
(213) 825-7909

2. William John Schill, "Third Party Evaluation of the Statewide Vocational Education Teacher Education Program," January 1980 (attached to the project final report).

Competency-Based Teacher Preparation for Part- Time Teacher Credentialing

Mt. San Jacinto College
Director: Hilding Nelson
Project No. 33-67132-3-9-451 (C) Cost: \$30,466
December 22, 1978 to June 30, 1980

Project Overview

This project was the fourth and final phase of an effort to develop a competency-based teacher education (CBTE) program to prepare part-time community college instructors for credentialing in a teacher education program on their local community college campuses. Six colleges where the course had been presented previously agreed to participate again and provided a total of seven experienced instructors. The program was also introduced via five new instructors at four new college sites, and a new instructor was trained at one of the continuing colleges. Inservice training and materials for use in the program were provided to all instructors. The CBTE course was offered at nine campuses in the spring of 1979, five campuses in the fall of 1979, and four in the spring of 1980. A total of 215 students enrolled and 155 (72%) received certificates of completion.

Follow-up Findings

The CBTE program materials were made available to the University of California, Riverside, and to University of California Extension in the fall of 1980, when the project staff elected to no longer manage the program. The materials can still be purchased from Mt. San Jacinto College; however, training is no longer available for new CBTE instructors. University of California Extension will certify students who complete CBTE training on campuses that continue to offer it, but the agency does not have resources to maintain the audiovisual materials required to offer the self-instruction program as an alternative to their more traditional "Techniques of Teaching" course. It appears that this option may not be available much longer unless the Chancellor's Office or some other agency sponsors the program.

Information Source

Dr. Milo Johnson
President
Rio Hondo College
3600 Workman Mill Road
Whittier, CA 90608
(213) 692-0921

Training for Teacher or Counselor Educators

Industrial Education Teacher Educator Inservice Training

California State University, Los Angeles
Director: Keith Gummere
Project No. 19-30544-3-0-417 (J) Cost: \$6,748
July 1, 1979 to December 31, 1980

Project Overview

Representatives of the 11 institutions that train industrial arts teachers were invited to a two-day conference in Los Angeles in March 1980. The conference was attended by 29

teacher educators, four State Department of Education staff members, and four secondary education industrial arts specialists who were presenters or panelists. The conference agenda included discussions of common problems, preliminary results of a national study to establish standards for industrial arts, accomplishments on participants' campuses, and new curriculum materials. A six-month extension of the project was granted to December 31, 1980 to use funds remaining in the budget: during this period, a second conference was held.

Follow-Up Findings

Letters were sent to industrial education department heads at each of the 11 universities represented at the conferences to obtain their views about the importance of these meetings. The seven who responded agreed that they were very important for improving coordination between the university programs, sharing ideas and information, and discussing common problems and their solutions. In 1981-1983, similar conferences for industrial education teacher educators are being arranged by California State University, Los Angeles as part of a comprehensive preservice and inservice project funded jointly by the Chancellor's Office and the State Department of Education.

Information Source

Keith Gummere
Department of Industrial Studies
California State University, Los Angeles
5151 State University Drive
Los Angeles, CA 90032
(213) 224-2484

Training for Home Economics Teacher Educators in the Use of the MATCHE Curriculum

San Diego State University
Director: Dr. Gwen Cooke
Project No. 8511 (J) Cost: \$15,953
January 1, 1979 to June 30, 1980

Project Overview

The primary purpose of this project was to increase utilization of the MATCHE (Management Approach to Teaching Consumer and Homemaking Education) modular curriculum for training home economics teachers. The MATCHE materials had been developed earlier under the sponsorship of the State Department of Education by teacher educators from ten universities. In this dissemination project, a total of ten workshops were held statewide for 122 home economics teacher educators, subject matter specialists, and teacher trainees. Use of the MATCHE curriculum materials was discussed, a 30-minute videotape on sex equity produced for the workshop was shown, and an updated booklet on the development and use of the curriculum modules was distributed. A descriptive brochure and a summary of seminar proceedings were also prepared.

Follow-Up Findings

Inquiries about use of the MATCHE materials in home economics teacher training programs were sent to ten

teacher educators who attended the MATCHE workshops and received copies of the modules. Of the six who replied, two were using the MATCHE materials in their programs; two said their use of the materials was "limited" or "rare"; and two were not using them.

Information Source:

Dr. Gwen Cooke
Director, School of Family Studies and Consumer Sciences
San Diego State University
San Diego, CA 92182
(714) 286-5380

Pupil Personnel Trainer Update

San Jose State University
Director: Dr. Stan Ostrum
Project No. 43-30560-3-9-415 (J) Cost: \$7,603
May 1, 1979 to June 30, 1980

Project Overview

The purpose of this project was to update the knowledge of college and university faculty who train counselors, school psychologists, and school social workers about the latest developments in career planning. Two-day conferences were held in May 1979 in Sacramento and San Diego; a total of 34 pupil personnel trainers representing 30 universities and colleges attended. Topics included, for example, the counselor as a consultant, the teacher/advisor program, a career education training program, and how to write a grant application. Following these conferences, 22 of the participants attended a three-day workshop in August 1979 on career planning and leadership training presented at their request by the staff of the Personal and Career Development Services Unit of the State Department of Education. Remaining project funds were used for a statewide meeting in May 1980 in Los Angeles, where credentialing, funding and grant writing, and vocational training for the handicapped were among the topics discussed; 25 educators attended this conference.

Follow-Up Findings

No participant rosters were obtained for these activities, consequently participants could not be contacted for perceptions of the importance of the conferences. Vocational guidance and counseling staff in the State Department of Education and the Chancellor's Office agreed that meetings of this nature are important for updating pupil personnel trainers about recent developments in their professional fields and current thrusts in guidance and counseling at the state and local levels.

Information Source

James Hirschinger
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

INSERVICE TRAINING

Gender Equity and Special Student Populations

Vocational Education Equity Project (VEEP)

Director: Dr. Barbara Peterson

Chaffey Community College District

Project No. 36-67660-3-8-912 (I) Cost. \$86,225
April 1, 1978 to June 30, 1979

California State University, Fullerton

Project No. 30-30510-3-9-655 (I) Cost. \$70,000
May 1, 1979 to September 30, 1980

Project Overview

The Vocational Education Equity Project (VEEP) was funded in both years studied. In the first year, a three-part (cycle) inservice training model was developed and extensively tested for creating awareness of sex discrimination and stereotyping, and improving knowledge and understanding of the laws pertaining to sex equity. A cadre of seven community college and ten secondary school area coordinators were trained to use the model. The three cycles were completed by 234 persons, who were then qualified to train others on their campuses, with the guidance of the area coordinators. A total of 2,403 participants were trained statewide in this first phase of VEEP.

In the second year, VEEP provided additional vocational educators at all levels with methods and materials for modifying programs and activities to attain sex equity in compliance with the legislation. Cycle I and II workshops were combined into a one-day program covering relevant laws, awareness of sexist behaviors, participation in nontraditional vocational programs, and planning actions to promote sex equity. The Cycle III workshop was also revised to use a more informal approach to training participants who could then present workshops on their campuses. Using the new models, VEEP staff presented two-day workshops for 374 secondary and community college participants in three locations not adequately served in 1978-79. The area coordinators also presented the workshops statewide for 686 participants, 317 of whom completed the three cycles and were qualified as trainers. A total of 53 on-campus workshops were conducted by trainers for 989 vocational educators. Three regional workshops were also held for 46 four-year college and university personnel.

Follow-Up Findings

In 1980-81, the Chancellor's Office and the State Department of Education each contributed \$80,000 to fund the third phase of VEEP. During this year, 681 community college educators went to regional or on-campus Cycle I, II, and III workshops. In Phase III, workshops were also given for the first time in promoting and coordinating nontraditional job development. A total of 106 community college educators attended job development workshops. Community college personnel made up 43% of all Phase III participants, 52% of the community college attendance was male. VEEP workshop participants who were interviewed during site visits for this study said that the workshops made them more aware of sex discrimination and sex equity issues.

Actual impact of the project on college campuses is difficult to measure, because of the interrelated activities of CC-PAGE (Community Colleges Plan to Achieve Gender Equity) and other local and state-sponsored gender equity activities. College self-evaluation data collected by the College Occupational Program Evaluation System (COPES) for the years 1979 to 1982 show a steady improvement in ratings for "the provision of inservice to train faculty and counselors to recognize and overcome sex bias and discrimination." Inservice training at the campus level was a major thrust of VEEP. VEEP also served as a dissemination agent for the products of other gender equity projects.

Information Source

Dr. Barbara Peterson

Library Building Room 281

California State University, Fullerton

State College Boulevard and Nutwood

Fullerton, CA 92634

(714) 773-3141

Statewide Inservice Training for Persons With Responsibility for Vocational Education for the Handicapped (FIVE H)

University of California, Los Angeles

Director: Lyman Goldsmith

Project No. 19-30049-3-8-090 (I) Cost: \$42,640
May 4, 1978 to June 30, 1979

Project No. 19-30049-3-9-752 (I) Cost \$62,284
July 1, 1979 to June 30, 1980

Project Overview

Two grants supported Project FIVE H (Formula for Improving Vocational Education for the Handicapped), a statewide leadership training program to improve the understanding and capabilities of persons responsible for vocational education programs for disabled persons. In 1979-80, a FIVE H handbook was developed and distributed to participants at 12 one-day seminars. The handbook and seminar agenda addressed attitudes, legal requirements, funding and resources, assessment, individualized education programs (IEPs), and inventory and evaluation. FIVE H project leaders trained 456 persons, including 111 community college educators. These seminar participants pledged to conduct inservice training for an estimated 5,500 educators at their home institutions.

In the second year of Project FIVE H, an inservice program was planned to build on the base of awareness and understanding created in the earlier inservice, by developing skills and capabilities needed to provide programs for the handicapped. An instructional notebook for dissemination at the inservice seminars was prepared that addressed legal requirements, elimination of stereotypes and biases, the IEP and its implementation at secondary and postsecondary levels, modifications to instruction, curricula, and physical facilities, and fiscal support and funding. Early in 1980, ten seminars were presented throughout the state, scheduled back-to-back with special education workshops. Teams of vocational and special educators were invited; 388 persons attended, 70 of whom represented 41 community colleges.

teacher educators, four State Department of Education staff members, and four secondary education industrial arts specialists who were presenters or panelists. The conference agenda included discussions of common problems, preliminary results of a national study to establish standards for industrial arts, accomplishments on participants' campuses, and new curriculum materials. A six-month extension of the project was granted to December 31, 1980 to use funds remaining in the budget: during this period, a second conference was held.

Follow-Up Findings

Letters were sent to industrial education department heads at each of the 11 universities represented at the conferences to obtain their views about the importance of these meetings. The seven who responded agreed that they were very important for improving coordination between the university programs, sharing ideas and information, and discussing common problems and their solutions. In 1981-1983, similar conferences for industrial education teacher educators are being arranged by California State University, Los Angeles as part of a comprehensive preservice and inservice project funded jointly by the Chancellor's Office and the State Department of Education.

Information Source

Keith Gummere
Department of Industrial Studies
California State University, Los Angeles
5151 State University Drive
Los Angeles, CA 90032
(213) 224-2484

Training for Home Economics Teacher Educators in the Use of the MATCHÉ Curriculum

San Diego State University

Director. Dr. Gwen Cooke

Project No. 8511

(1)

Cost: \$15,953

January 1, 1979 to June 30, 1980

Project Overview

The primary purpose of this project was to increase utilization of the MATCHÉ (Management Approach to Teaching Consumer and Homemaking Education) modular curriculum for training home economics teachers. The MATCHÉ materials had been developed earlier under the sponsorship of the State Department of Education by teacher educators from ten universities. In this dissemination project, a total of ten workshops were held statewide for 122 home economics teacher educators, subject matter specialists, and teacher trainees. Use of the MATCHÉ curriculum materials was discussed, a 30-minute videotape on sex equity produced for the workshop was shown, and an updated booklet on the development and use of the curriculum modules was distributed. A descriptive brochure and a summary of seminar proceedings were also prepared.

Follow-Up Findings

Inquiries about use of the MATCHÉ materials in home economics teacher training programs were sent to ten

teacher educators who attended the MATCHÉ workshops and received copies of the modules. Of the six who replied, two were using the MATCHÉ materials in their programs, two said their use of the materials was "limited" or "rare"; and two were not using them.

Information Source:

Dr. Gwen Cooke
Director, School of Family Studies and Consumer
Sciences
San Diego State University
San Diego, CA 92182
(714) 286-5380

Pupil Personnel Trainer Update

San Jose State University

Director: Dr. Stan Ostrum

Project No. 43-30560-3-9-415

(1)

Cost: \$7,603

May 1, 1979 to June 30, 1980

Project Overview

The purpose of this project was to update the knowledge of college and university faculty who train counselors, school psychologists, and school social workers about the latest developments in career planning. Two-day conferences were held in May 1979 in Sacramento and San Diego; a total of 34 pupil personnel trainers representing 30 universities and colleges attended. Topics included, for example, the counselor as a consultant, the teacher/advisor program, a career education training program, and how to write a grant application. Following these conferences, 22 of the participants attended a three-day workshop in August 1979 on career planning and leadership training presented at their request by the staff of the Personal and Career Development Services Unit of the State Department of Education. Remaining project funds were used for a statewide meeting in May 1980 in Los Angeles, where credentialing, funding and grant writing, and vocational training for the handicapped were among the topics discussed; 25 educators attended this conference.

Follow-Up Findings

No participant rosters were obtained for these activities, consequently participants could not be contacted for perceptions of the importance of the conferences. Vocational guidance and counseling staff in the State Department of Education and the Chancellor's Office agreed that meetings of this nature are important for updating pupil personnel trainers about recent developments in their professional fields and current thrusts in guidance and counseling at the state and local levels.

Information Source

James Hirschinger
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

INSERVICE TRAINING

Gender Equity and Special Student Populations

Vocational Education Equity Project (VEEP)

Director: Dr. Barbara Peterson

Chaffey Community College District

Project No. 36-67660-3-8-912 (J) Cost: \$86,225
April 1, 1978 to June 30, 1979

California State University, Fullerton

Project No. 30-30510-3-9-655 (J) Cost: \$70,000
May 1, 1979 to September 30, 1980

Project Overview

The Vocational Education Equity Project (VEEP) was funded in both years studied. In the first year, a three-part (cycle) inservice training model was developed and extensively tested for creating awareness of sex discrimination and stereotyping, and improving knowledge and understanding of the laws pertaining to sex equity. A cadre of seven community college and ten secondary school area coordinators were trained to use the model. The three cycles were completed by 234 persons, who were then qualified to train others on their campuses, with the guidance of the area coordinators. A total of 2,403 participants were trained statewide in this first phase of VEEP.

In the second year, VEEP provided additional vocational educators at all levels with methods and materials for modifying programs and activities to attain sex equity in compliance with the legislation. Cycle I and II workshops were combined into a one-day program covering relevant laws, awareness of sexist behaviors, participation in nontraditional vocational programs, and planning actions to promote sex equity. The Cycle III workshop was also revised to use a more informal approach to training participants who could then present workshops on their campuses. Using the new models, VEEP staff presented two-day workshops for 374 secondary and community college participants in three locations not adequately served in 1978-79. The area coordinators also presented the workshops statewide for 686 participants, 317 of whom completed the three cycles and were qualified as trainers. A total of 53 on-campus workshops were conducted by trainers for 989 vocational educators. Three regional workshops were also held for 46 four-year college and university personnel.

Follow-Up Findings

In 1980-81, the Chancellor's Office and the State Department of Education each contributed \$80,000 to fund the third phase of VEEP. During this year, 681 community college educators went to regional or on-campus Cycle I, II, and III workshops. In Phase III, workshops were also given for the first time in promoting and coordinating nontraditional job development. A total of 106 community college educators attended job development workshops. Community college personnel made up 43% of all Phase III participants, 52% of the community college attendance was male. VEEP workshop participants who were interviewed during site visits for this study said that the workshops made them more aware of sex discrimination and sex equity issues.

Actual impact of the project on college campuses is difficult to measure, because of the interrelated activities of CC-PAGE (Community Colleges Plan to Achieve Gender Equity) and other local and state-sponsored gender equity activities. College self-evaluation data collected by the College Occupational Program Evaluation System (COPES) for the years 1979 to 1982 show a steady improvement in ratings for "the provision of inservice to train faculty and counselors to recognize and overcome sex bias and discrimination." Inservice training at the campus level was a major thrust of VEEP. VEEP also served as a dissemination agent for the products of other gender equity projects.

Information Source

Dr. Barbara Peterson

Library Building Room 281

California State University, Fullerton

State College Boulevard and Nutwood

Fullerton, CA 92634

(714) 773-3141

Statewide Inservice Training for Persons With Responsibility for Vocational Education for the Handicapped (FIVE H)

University of California, Los Angeles

Director: Lyman Goldsmith

Project No. 19-30049-3-8-090 (J) Cost: \$42,640
May 4, 1978 to June 30, 1979

Project No. 19-30049-3-9-752 (J) Cost: \$62,284
July 1, 1979 to June 30, 1980

Project Overview

Two grants supported Project FIVE H (Formula for Improving Vocational Education for the Handicapped), a statewide leadership training program to improve the understanding and capabilities of persons responsible for vocational education programs for disabled persons. In 1979-80, a FIVE H handbook was developed and distributed to participants at 12 one-day seminars. The handbook and seminar agenda addressed attitudes, legal requirements, funding and resources, assessment, individualized education programs (IEPs), and inventory and evaluation. FIVE H project leaders trained 456 persons, including 111 community college educators. These seminar participants pledged to conduct inservice training for an estimated 5,500 educators at their home institutions.

In the second year of Project FIVE H, an inservice program was planned to build on the base of awareness and understanding created in the earlier inservice, by developing skills and capabilities needed to provide programs for the handicapped. An instructional notebook for dissemination at the inservice seminars was prepared that addressed legal requirements, elimination of stereotypes and biases, the IEP and its implementation at secondary and postsecondary levels, modifications to instruction, curricula, and physical facilities, and fiscal support and funding. Early in 1980, ten seminars were presented throughout the state, scheduled back-to-back with special education workshops. Teams of vocational and special educators were invited, 388 persons attended, 70 of whom represented 41 community colleges.

Participants pledged to train over 3,000 persons at their home institutions. Following the seminars, project staff compiled information collected throughout the project about successful strategies for serving the handicapped into the *How To and Can Do Manual*, which was mailed to educators statewide, including all community college occupational deans and enablers.

Follow-Up Findings

Funding for Project FIVE H was not renewed after June 1980. At that time, the FIVE H office at UCLA was closed and all records were delivered to the State Department of Education. Participant rosters were not included in the FIVE H file in the Research Coordinating Unit, consequently participants could not be surveyed to obtain their perceptions of the impact of the training at their institutions or to learn if they had passed on what they learned to others there. A few FIVE H manual writers, workshop participants, and others who obtained copies of manuals were contacted during site visits. They believed that the training and materials provided was useful to community college enablers, counselors, and others who work with the handicapped, but that the project had only been able to "scratch the surface" in the time it was in operation.

Information Source

J Lyman Goldsmith
2892 Woodlawn Avenue
San Marino, CA 91108
(213) 283 3510

Vocational Guidance for Handicapped Students: A Training Program

Chaffey Community College District

Director: Dr. Robert Harris

Project No 36-67660-3-9-776 (1) Cost: \$32,680
July 1, 1979 to June 30, 1980

Project Overview

In this project, a comprehensive training program and related training package were developed for use with secondary and community college counseling personnel to increase their effectiveness in providing vocational guidance to handicapped students. A multi-disciplinary cadre created a training package which contained processes for analyzing the labor market, identifying training programs and employers, providing information about occupations, and assessing the needs and abilities of handicapped students. Four hundred copies of the manual, *Vocational Guidance for Handicapped Students: A Training Program*, were printed. The manual contains chapters on disabilities, vocational evaluation, occupational and educational information, vocational counseling, job analysis and modification, job seeking, and additional resources. Three three-day training programs were conducted in Southern California; enrollment was limited to 85 persons, approximately one-third of whom were from community colleges. Copies of the training manual were provided to the workshop participants, the Chancellor's Office, the State Department of Education, and other requesting groups and individuals.

Follow-Up Findings

Based on responses of individuals who attended the training workshops, this was one of the outstanding personnel training projects studied. Specific long-term outcomes were reported by seven of eight participants who replied to follow-up inquiries. They said the workshop helped them understand and respond to the needs of handicapped students; that they had incorporated strategies and materials discussed at the workshop into their programs; and that they had shared the information with other counselors. Several also attended more recent workshops of follow-on projects awarded to Chaffey College in 1980-81 and 1981-81.

Information Source

Loma Hopkins
Educational Resources Center
Chaffey College
5885 Haven Avenue
Alta Loma, CA 91701
(714) 987-1737

Inservice Training for Department/Division Chairpersons and Members of Protected Classes in California Community Colleges

Sierra Joint Community College District

Director: Martin Jack

Project No. 31-66936-3-8-467 (C) Cost: \$68,870
March 1, 1978 to June 30, 1979

Project Overview

This project was to provide two two-day workshops with sessions on the national priorities identified in P.L. 94-482 for California community college vocational education division and department chairpersons. Following these workshops, the participants were to conduct training sessions for faculty on their campuses related to the national priorities: serving the disadvantaged and handicapped, and eliminating sex discrimination in vocational education. The participating chairpersons were also to attend follow-up half-day sessions to share information and materials found most effective in dealing with local problems. Women and members of protected classes were to be invited to the workshops to encourage their involvement in administrative roles. No reports describing the project outcomes were on file.

Follow-Up Findings

Information about the project was requested from the director, who explained that Sierra College had contracted the work to a private firm at the request of the Chancellor's Office, and referred further questions to the state monitor. The Chancellor's Office representative indicated that the quality of the inservice materials and presentations was such that he did not believe there had been any lasting impact on community colleges.

Information Source

Doug Cronin
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

Subject-Matter Areas

Agriculture Inservice Education

California Polytechnic State University, San Luis Obispo

Director: Dr. Larry Rathbun

Project No. 40-30569-3-9-408 (1) Cost: \$16,963

December 1, 1978 to December 1, 1979

Project Overview

In this continuing project, 14 inservice workshops were presented that were attended by approximately 320 secondary and community college agriculture teachers. The workshops included nine mini-workshops and five skills weeks offered during the summer at the five agriculture teacher training institutions. Consultant services were provided to 25 institutions through the ATAC (Agriculture Teachers As Consultants) program. Two seminars were conducted for first-year teachers and visits were made to 28 first-year teachers by teacher educators.

Follow-Up Findings

The agricultural education specialist for the Chancellor's Office was interviewed to obtain his views about how this jointly-funded inservice project serves community college educators. He described how, in the planning process, the needs of community college agriculture teachers are assessed and specific workshops are designed for them. For example, in recent years a major thrust of the inservice activities for teachers at this level has been the introduction of uses of the mini-computer in agriculture. As a result, agriculture educators in the state are said to lead teachers in other subject-matter areas in applying this technology and teaching about it in their programs.

Information Source

Ralph Matthews
Program Evaluation and Approval
California Community Colleges
1238 "S" Street
Sacramento, CA 95814
(916) 445-0486

Fire Science Teaching Methodology

Yosemite Community College District, Columbia College

Director: Chester Palmer

Project No. 50-71340-3-9-456 (1) Cost: \$3,573

May 1, 1979 to June 30, 1980

Project Overview

In this project, the workshop presenter toured California in May 1979 and presented 16 one-day workshops on teaching methodology to a total of 190 fire science instructors. The participants were community college instructors and fire service training officers from fire departments who train professional fire service employees, volunteer firefighters, and others who are not yet employed in the fire service. The workshop topics included instruction techniques, learning styles, alternative teaching techniques, utilization of group dynamics, adaption to women and minority students, evaluation of instruction, student performance standards, and the new fire science curriculum and other resources.

Follow-Up Findings

Inquiries about the impact of the inservice training on community college fire science programs were sent to directors of four programs who were known to have attended a workshop. The three who replied thought that the presentations were excellent, but that there was little or no impact on their programs. Poor attendance by community college faculties and prior knowledge of the information presented were given as reasons.

Information Source

Ray Bachtelle
P.O. Box 544
Mi Wuk Village, CA 95346
(209) 586-5763

Health Occupations Inservice Education

California State University, Sacramento

Director: Dr. Jeffrey Reyes

Project No. 35-30619-3-0-409 (1) Cost: \$19,860

January 1, 1979 to June 30, 1980

Project Overview

In this inservice program, participants were required (1) to interview recent graduates of their programs to gather information about the relevancy of their instruction, (2) to visit health facilities to examine current practices in their area of expertise, and (3) to prepare written reports on their findings. A random sample of 160 community college and secondary level health occupations instructors were invited to participate; 109 agreed; and 62 completed the program. Their reports were reviewed by consultants representing secondary and community college health occupations programs, whose inputs were used to prepare the handbook, *Strategies for Program Improvement for Health Occupations Instructors*, which was disseminated to health careers educators at their annual state conference in June 1980.

Follow-Up Findings

Inquiries were sent to 24 community college health occupations instructors who completed the inservice program. Nine replies were received. Six of the respondents described how they used the information to justify new equipment purchases, modify or add program components to meet identified needs, and as documentation for accreditation and COPES reviews. Several were continuing to conduct the graduate follow-up each year. Those who said they had little or no benefit from the activity had changed jobs, or were in communities where they kept in touch with graduates and employers anyway, so that a formal follow-up procedure was not so useful to them.

Information Source

Jean Clawson
Program Evaluation and Approval
California Community Colleges
1238 "S" Street
Sacramento, CA 95814
(916) 445-0486

Home Economics Inservice Education: Fashion Merchandising

Los Angeles Community College District, Harbor College

Director: James Clines

Project No. 19-64741-3-9-455 (J) Cost: \$2,334
May 1, 1979 to June 30, 1980

Project Overview

This inservice project brought individuals from the fashion industry together with fashion design and fashion merchandising instructors for the purpose of helping these teachers update and upgrade their curriculums. In November 1979, approximately 100 community college educators representing 29 colleges attended a two-day workshop in fashion merchandising in Los Angeles. The program featured a tour of the California Fashion Mart. Presentations about the fashion industry and training for employment in it were made by high-level professionals from the industry.

Follow-Up Findings

Inquiries were sent to 24 participants identified in the project report. The eight who responded were unanimous in their view that this workshop was worthwhile, and several said it was one of the best they had ever attended. They all described specific actions they had taken as a result of their attendance, such as starting new programs, making contacts with industry, incorporating information from the workshop into course content, and using what was learned in making administrative decisions about programs. Considering the amount of VEA funds invested, this project was one of the most cost-effective inservice activities studied.

Information Source

Lenore Eisenstein
Family and Consumer Studies
Los Angeles Harbor College
1111 Figueroa Place
Wilmington, CA 90744
(213) 518-1000

Consumer and Homemaking Education Inservice Education

Sierra Joint Community College District

Director: Martin Jack

Project No. 31-66936-5-8-427 (C) Cost: \$19,450
April 15, 1978 to June 30, 1979

Project No. 31-66936-5-9-976 (C) Cost: \$17,273
February 1, 1979 to June 30, 1980

Project Overview

This continuing project was funded during both years studied. In the fall of 1978, one-day workshops were conducted at Mt. San Antonio College, Ohlone College, and the San Diego County Office of Education for community college administrators and managers of home economics education programs. The workshop program included panel discussions of the new vocational education legislation, P.L. 94-482, the *California Five-Year State Plan for Vocational Education*, community college VEA allocations, and consumer and homemaking education (CHE) program evaluation and resources. The workshops were attended by

a total of 118 participants representing 75 community colleges and college districts. A summary of the workshop proceedings was sent to participants. Information for an update of the *Consumer Education Curriculum Guide for Home Economics in California Community Colleges* was also collected and a revised guide was distributed.

In the second year of funding, four one-day workshops were presented in the spring and a two-day conference was scheduled the following fall. Topics discussed included program review, modification, and promotion; national and state agencies concerned with vocational education; and current instructional concerns. Conference participants also reviewed instructional materials displayed for them. About 200 community college CHE teachers and their administrators, representing over half the community colleges in the state, attended these inservice activities.

Follow-Up Findings

Follow-up inquiries were sent to 24 workshop participants and other participants were contacted during site visits. The majority of those who responded said the conferences were helpful in a number of ways they provided reinforcement for what the instructors were doing in their CHE programs, opportunities for sharing ideas with peers, and renewed enthusiasm. Only one person described a specific use of conference information for program evaluation and accreditation. Seventeen percent of the respondents said that their attendance was not worthwhile.

Information Source

Bettye Nippert
Specialist, Consumer and Homemaking Education
Sierra College
5000 Rocklin Road
Rocklin, CA 95677
(916) 624-3333

HERO (Home Economics Related Occupations) Inservice Education

San Mateo County Office of Education

Director: Mary Conway

Project No. 41-10413-3-8-800 (J) Cost: \$39,882
April 1, 1978 to June 30, 1979

Project Overview

This was a continuing project to assist home economics teachers statewide to plan or improve secondary and community college vocational education programs training individuals for occupations related to home economics. Inservice activities in this funding period included 11 workshops in locations throughout the state which were attended by 215 participants, including 31 community college educators. "Roadshow" presentations were made in eight cities statewide in the fall and spring, a total of 2,646 participants attended these activities. The project director provided technical assistance in answer to over 150 requests by individuals and groups, and made presentations to home economics education teacher trainees at two universities. Three issues of the newsletter, *Intercom*, were published and distributed in mailings of 5,000 each to secondary schools and community colleges statewide.

Follow-Up Findings

A follow-up of workshop participants conducted by the project evaluator in May 1979 is reported in the project report. Participants had used information to review programs (56%) and plan new programs (31%); others had used resources (82%) and strategies (54%) introduced in the workshops. Responses from community college teachers were not reported separately from those of secondary school teachers, however, these results were for the entire population. A few community college participants were contacted during site visits in this impact study and inquiries were mailed to others. There was general agreement that the workshops seemed to be oriented more to secondary programs than to community college programs. Since 1979, the inservice education project for home economics related occupations has been funded as a secondary-level-only project by the State Department of Education.

Information Source

Mary Conway
Regional Supervisor
Vocational Education Coastal Regional Office
1111 Jackson Street Room 4064
Oakland, CA 94607
(415) 464-0955

Industrial Education Inservice Education

Orange Unified School District

Director: Tom Schrodi

Project No. 30-66621-3-8-846 (I) Cost: \$30,556
July 1, 1978 to June 30, 1979

Project Overview

As a result of this inservice project, three two-day workshops were presented for industrial education instructors early in 1979 in Fresno, San Diego, and Sacramento. The workshop program included instruction in the process of developing competency-based curriculum, and information about special needs areas. Participants were divided into groups according to their teaching areas; presentors represented the areas of auto, construction, visual communications, health, metals, and electricity/electronics. Curriculum materials developed by the State Department of Education were reviewed. The three workshops were attended by a total of 285 participants, including 15 community college educators representing 11 colleges.

Follow-Up Findings

A list of community college participants was obtained from the project coordinator. Inquiries were sent to one participant from each college represented. Only three responses were received. Two were from individuals who said they did not attend the workshop. The third respondent did not recall details of this particular activity after so long a time, since he regularly attended activities of this nature.

Information Source

Roy Meade
Coordinator, ROP
Orange Unified School District
370 N. Glassell Street
Orange, CA 92666
(714) 998-3820

Industrial Education Inservice Education

California State University, Long Beach

Director: Dr. Irvin Lathrop

Project No. 19-30536-3-9-407 (I) Cost: \$39,505
November 15, 1978 to June 30, 1980

Project Overview

In this project, 15 inservice workshops in industrial education areas were presented in the spring of 1979 for about 85 high school and ROP instructors statewide, the following fall, another series of 15 workshops was presented for over 160 instructors. Over 100 requests for technical assistance to LEAs initiated by regional supervisors of the State Department of Education were processed by project staff. Although six of the spring workshops were held on community college campuses, no participation by community college personnel as presentors or audience was reported. Only five community college educators were identified who attended workshops in the fall series.

Follow-Up Findings

Inquiries were sent to the five community college educators who participated asking them how they used information obtained in the workshops, but no responses were received.

Information Source:

Dr. Irvin Lathrop
Director of Extended Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840
(213) 498-5561

Office and Distributive Education Inservice Education

California State University, Sacramento

Director: Dr. Jeffrey Reyes

Project No. 34-30619-3-9-410 (I) Cost: \$45,647
January 1, 1979 to December 31, 1979

Project Overview

This project resulted in a variety of inservice activities for office and distributive education teachers and program administrators, including two management conferences for business education department chairpersons, a management conference for distributive education administrators, a banking conference, two word processing conferences, six typewriting workshops, and six mini-courses in competency-based instructional strategies. These activities were attended by a total of 1,158 persons, 10% of whom represented community college programs. Twelve demonstration sites at high schools and regional occupational programs also hosted 262 visitors.

Follow-Up Findings

Inquiries were mailed to 33 community college employees who participated in workshops on word processing, typewriting, or competency-based instruction. Eighteen replies were received. Seven respondents could not recall attending the specified workshop or had forgotten details and did not describe any outcomes. Several of these pointed

out that they had attended numerous similar workshops since the one in question and consequently could not identify specific outcomes with this particular activity. Seven other respondents described using information obtained in the workshops to plan or modify instructional programs and to assist handicapped students learn typewriting skills. Several said they shared the information they received with other faculty. Three respondents had not used workshop information because they had changed jobs, or already knew about what was presented. The remaining instructor suggested that a shadowing program would be more fruitful than workshops for community college teachers.

Information Source

Claire O'Brien
Vocational Education Unit
State Department of Education
721 Capitol Mall
Sacramento, CA 95814
(916) 323-3483

Teaching and Counseling Techniques

A Program to Improve Instructional Effectiveness in Vocational Education

Evaluation and Training Institute

Director: Dr. Clare Rose

Project No. 8075

(C)

Cost: \$80,226

September 18, 1978 to June 30, 1979

Project Overview

In this project, regional workshops were presented for approximately 104 faculty representing 40 community colleges on competency-based (criterion-referenced) instruction. A special packet of four self-instruction modules was developed and disseminated to the workshop participants. The modules focused on writing objectives, analyzing tasks, defining student competencies, and developing tests. The materials were designed to be used by faculty in workshops on their local campuses. A special workshop on decision-making and program evaluation was also given for ten administrators.

Follow-Up Findings

The project director reported informal feedback from participants who said the workshop information had been helpful to them, and who were motivated to attend more recent workshops presented by Evaluation and Training Institute. This contractor has continued to receive VEA project funds from the Chancellor's Office to provide inservice training activities for community college personnel; for example, in 1980-1982, ETI staff developed training materials and trained teams of trainers to give workshops on their campuses to promote cultural awareness and sensitivity to the special needs of disadvantaged students.

Information Source

Dr. Clare Rose
President
Evaluation and Training Institute
12401 Wilshire Boulevard Suite 304
Los Angeles, CA 90025
(213) 820-8521

Career Counseling Task Forces

University of California, Los Angeles

Director: Dr. Charles Healy

Project No. 19-30049-3-9-504 (I) Cost: \$69,676

June 1, 1979 to June 30, 1980

Project Overview

This project promoted a team approach to providing career guidance services: high school and community college teams of vocational teachers, academic teachers, counselors, and administrators attended a series of two-day workshops where they planned career guidance services for their schools. A total of 231 persons, including teams from 13 community colleges, were involved. Series of two to four workshops were conducted in Sacramento, Fresno, and the Los Angeles area. About three-fourths of the participants indicated that they would implement their plans in their schools. Materials developed for the project were filed in the ERIC Clearinghouse for Counseling under the title, *Staff Development Materials for Career Counseling Task Forces*.

Follow-Up Findings

The project director reported using project materials in counselor training classes at UCLA. He supplied the names of team members and inquiries were mailed to leaders of 11 community college teams. Three responses were received; one respondent said that as a result of involvement in the workshops, his college now had a new career center where many of the materials and concepts introduced in the workshop were used. Another respondent explained that other members of his team were working in different jobs now, but that he continued to use information from the workshops. The third respondent, a career counselor, said that he and the placement officer who attended as a team were more aware of the need to distribute career information. He believed that it would be easier to implement the team approach in a high school setting, because of the different power structure there.

Information Source

Dr. Charles Healy
Graduate School of Counseling
University of California, Los Angeles
405 Hilgard Avenue
Los Angeles, CA 90024
(213) 825-3000

Individualized Inservice Activities

Planning for Renewal in Occupational Programs (PROP)

Monterey Peninsula College

Director: Dr. Philip Nash

Project No. 27-66100-3-8-438 (C) Cost: \$50,192
April 4, 1978 to June 30, 1979

Project Overview

PROP (Planning for Renewal in Occupational Programs) is a brokering system through which arrangements are made for vocational educators to be released from their normal duties for up to one week to visit other colleges and programs of their choice. The objective is for them to collect ideas and information for improving occupational education at their home college. During the 1978-79 project year, arrangements were made for 60 persons representing 31 community colleges and 33 different disciplines to visit 39 host colleges. To assist visitors in selecting appropriate sites, a survey was sent to all community colleges in the state and deans of instruction were asked to identify exemplary programs offered at their college. The responses were compiled into the report, *A Survey of Exemplary Vocational Education Programs in California Community Colleges*, and sent to deans who responded. At a PROP dissemination conference in April 1979, over 50 community college educators shared ideas on occupational education programs. Two workshops were also conducted by PROP in which vocational educators from the field, state officials, and elected officials considered issues concerning vocational education in California.

Follow-Up Findings

PROP has continued to receive Subpart 3 funds. Approximately 100 community college occupational instructors, administrators, and counselors made PROP visits in 1979-1981. Funding was delayed for the 1981-82 school year; consequently no PROP visits took place that year. Whenever possible during site visits for the impact study, former PROP visitors were questioned about the experience. All of them cited ways they had used information obtained during their visits to accomplish a range of specific objectives, from designing a new auto shop facility to planning for a non-campus college. The PROP participants and their administrators agreed unanimously that this individualized format for professional development is more productive than workshops or conferences. For this reason, it was recommended that the PROP project be expanded and funded as a continuing service of the Chancellor's Office, with PROP visits available to each college on a regular basis.

Information Source

Dr. Philip Nash
Associate Dean of Instruction
Monterey Peninsula College
980 Fremont Boulevard
Monterey, CA 93940
(408) 646-4035

Dissemination Through Use of Peer Consultants

Mt. San Antonio Community College District

Director: Paulette Perfumo

Project No. 19-64824-3-8-407 (C) Cost: \$10,475
May 1, 1978 to June 30, 1979

Project Overview

In this project, deans of occupational education were surveyed to identify peer consultants who had developed new methods of vocational instruction, exemplary programs and/or services to meet the needs of disadvantaged, handicapped, and/or limited-English speaking students, successful techniques for reducing sex bias in vocational programs, and/or successful methods of implementing vocational guidance and counseling and other activities pertaining to vocational education. Forms and procedures were developed for facilitating peer consultant visits to requesting colleges. Approximately 70 consultations were arranged.

Follow-Up Findings

A roster of peer consulting project participants was not readily available. Inquiries were made about the project during site visits and several peer consultants and recipients of the service were contacted in this way. Based on these interviews and on testimonial letters received by the project director, there is no doubt that this form of inservice is very cost-effective and is beneficial to the consultants, as well as the persons they advise. It was noted that interviewees who had experiences both as PROP visitors and as recipients of the peer consulting service recalled their PROP visit and its outcome more clearly than the consultation. Also, former peer consultants seemed to remember the experience as well or better than those they assisted. Apparently the more active role in each case resulted in a longer-lasting impression on the individuals involved. The peer consulting service was refunded through 1982 as a companion project to PROP.

Information Source

Dr. Philip Nash
Associate Dean of Instruction
Monterey Peninsula College
980 Fremont Boulevard
Monterey, CA 93940
(408) 646-4035

Management

Inservice Training for Vocational Education Administrators

Monterey Peninsula College

Director: Dr. Philip Nash

Project No. 27-66100-3-9-452 (J) Cost: \$19,409
May 1, 1979 to September 30, 1980

Project Overview

In this project, one-day workshops were presented for vocational education administrators in ten locations statewide. The workshops consisted of half-day sessions on two topics identified through a survey of school and college administrators: time management and program evaluation.

Near the end of the funding period, a two-day workshop on needs assessment, planning, evaluation, and management effectiveness was also conducted. It was intended by the workshop planners that participants would be prepared for more effective management and to offer inservice sessions for their faculties when they returned home. The 280 persons who attended included vocational administrators, special project coordinators, and academic administrators. Approximately half were employed by community college districts.

Follow-Up Findings

Follow-up inquiries were sent to 35 participants identified in the project final report. Of the 21 who responded, 18 (86%) indicated that their attendance was worthwhile and 13 of these cited specific uses they had made of the information. They reported improving scheduling and other management practices, conducting more meaningful evaluations, and using evaluation results more effectively. Two vocational deans who attended the two-day workshop later arranged a similar two-day session for representatives of 11 colleges in their region.

Information Source

Dr. Philip Nash
Associate Dean of Instruction
Monterey Peninsula College
980 Fremont Boulevard
Monterey, CA 93940
(408) 646-4035

Inservice Training for State Professional Staff

Merced Community College District

Director: Dr. W. C. Martineson
Project No. 24-65797-3-8-454 (C) Cost: \$22,059
April 1, 1978 to June 30, 1979

Project Overview

A series of 13 inservice presentations were conducted by SAGE Institute International for personnel of the Chancellor's Office. Topics were based on a staff needs assessment and included collective bargaining, financial trends in community colleges, organizational communications, planning, human resources in administration, staff development, higher education and the law, and other relevant issues.

Follow-Up Findings

State staff who were asked about this project remembered the workshops as high quality, professional presentations. The information was, for the most part, relevant and timely and has had continued use by Chancellor's Office personnel.

Information Source

Doug Cronin
College Services
California Community Colleges
1122 "8" Street
Sacramento, CA 95814
(916) 445 0102

Work Experience Education and CETA

Work Experience Education Inservice Education

Napa County Superintendent of Schools

Director: J. Wilson Bilieu
Project No. 24-10280-3-9-413 (I) Cost: \$5,656
January 1, 1979 to June 30, 1980

Project Overview

Inservice training in work experience education was presented in this project in three phases: in the spring of 1979, workshops on related instruction were held at 13 locations statewide. The new *Core Curriculum for Work Experience Education* was presented to 418 secondary school and community college work experience coordinators who attended. In the fall of 1979, a second series of workshops on rules and regulations was offered at 14 locations. The 723 coordinators who attended received copies of the *Laws and Regulations Governing Work Experience Education Handbook*. In the spring of 1980, a slide-tape presentation on the organization and operation of work experience education, transparencies on administration interrelationships, and related printed materials were developed which work experience coordinators statewide could use with local administrator groups. The materials were shown at six sites to 380 educators and were available from the vocational education regional offices.

Follow-Up Findings

Inquiries were sent to 19 community college educators identified by the project coordinator as having attended one of the work experience education workshops. Six of the nine who responded did not recall attending the activity, the other respondents pointed out that the workshops were geared for the high school level and were not applicable to community college programs. The only positive impact reported at the postsecondary level was the promotion of articulation between secondary and community college programs.

Information Source

Bernie Norton
Vocational Education Consultant
Vocational Education Coastal Regional Office
1111 Jackson Street Room 4064
Oakland, CA 94607
(415) 464-0955

CETA Workshops: Orientation for Local Administrators and Inservice Training in Job Development

Planning Associates

Director: John Twomey
Project No. 8531 (I) Cost: \$8,948
May 1, 1979 to June 30, 1980
Project No. 8532 (I) Cost: \$8,484
August 8, 1979 to June 30, 1980

Project Overview

Two projects were funded to provide inservice training related to the operation of CETA (Comprehensive Employment Training Act) programs. The purpose of the first was

to inform school administrators about the proper use of CETA funding sources. Nine workshops were conducted in the fall of 1979 for a total of 170 persons, most of whom represented present and potential deliverers of services and prime sponsors. Approximately 27% were employed by community colleges. The workshop presentation focused on applications of CETA funds with target populations in school vocational programs; special emphasis was given to uses of the governor's grant money. The newly-revised CETA manual prepared by the State Department of Education Manpower Unit was examined and discussed. At eight workshops, the main seminar was followed by a shorter session in which individual referral programs were discussed.

The purpose of the second project was to upgrade the job development and job placement components of CETA and CWETA (California Worksite Education and Training Act) vocational education projects. One-day inservice workshops were presented in five locations statewide in May and June of 1980 for a total of 116 community college and secondary school administrators, instructors, and counselors and representatives of prime sponsors, community-based organizations, and the private sector. At each workshop, job placement and job development in CETA and CWETA programs were discussed by a local panel representing the Chancellor's Office, the State Department of Education, the Industry Education Council of California, CETA, EDD, the California Employment and Training Advisory Council, prime sponsors, Private Industry Councils, and the National Alliance of Business. Local programs were discussed in depth and resources for employer contacts were identified. Two publications of the California Advisory Council on Vocational Education were disseminated at the workshops. *A Coordinated Approach in Delivering Comprehensive Vocational Services* and *A Guide for Linking Comprehensive Vocational Education Services*.

Follow-Up Findings

Community college participants from 15 colleges were identified in the final report for the orientation project. Inquiries were sent to one participant from each college. One of the five respondents indicated that the workshop was of value, as it furthered his knowledge of CETA legislation and practices and was an opportunity to exchange ideas with other community college deliverers of services. Three respondents said that they did not remember this particular workshop, as they had attended many like it, and could not identify any impact on their program from this experience. The remaining individual had changed jobs and did not have an opportunity to use the information.

Information Source
John Twomey
Planning Associates
P.O. Box 549
Merced, CA 95340
(209) 383-0820

Miscellaneous Topics

Coordination of Common Personnel Training Activities

California State University, Sacramento
Directors, Management Team
Project No. 8108 (1) \$ Cost: \$71,040
June 1, 1978 to March 31, 1980

Project Overview

Personnel training activities presented by this project were planned by a management team of three staff members from the Chancellor's Office and three from the State Department of Education. Six workshops were given on techniques of teaching, counseling, and placing the disadvantaged; six, on serving the handicapped; 12, on CETA; five, on cooperative education; three, on using advisory committees; and three, on specific subject-matter areas requested by the management team. A total of 1,160 secondary and community college educators attended the inservice workshops.

Follow-Up Findings

Rosters were not on file for this project; consequently, participants could not be identified and contacted for follow-up information. Based on the information available in project reports and evaluation reports, it seems likely that there was immediate benefit to some participants, but there was no way for the study team to determine the extent of any lasting impact. In the years after this project was funded, no "umbrella" personnel training activities of this nature have been approved. Instead, all inservice projects have been specialized, with more specific goals and objectives, and management by individuals who are required to provide information about beneficiaries.

Information Source

Bill Anderson
Vocational Education Unit
State Department of Education
721 Capitol Mall
Sacramento, CA 95814
(916) 445-3314

PROJECTS RESULTING IN PRODUCTS OR SERVICES

PROJECTS RESULTING IN PRODUCTS

Research Reports

Statewide Longitudinal Study of Community College Students

Los Angeles Community College District, Pierce College

Director: Dr. Stephen Sheldon

Project No. 19-64741-3-8-453 (C) Cost: \$123,887

May 1, 1978 to June 30, 1979

Project Overview

This was the first year of a three-year longitudinal study of a sample of 8,000 California Community college students at 15 representative colleges. The purposes of the research were to learn more about the students and how college affects their lives, to test the use of sampling for completing meaningful longitudinal studies, and to provide information about special needs students and programs for them. Two reports, a fall report and a spring report, were published and disseminated to the Chancellor's Office, community college associations, ERIC, the Center for the Study of Community Colleges, and requesting agencies and colleges.

Follow-Up Findings

The longitudinal study was completed in 1981, and resulted in a more precise characterization of community college students and their purposes in attending college than was available previously. The study also demonstrated that a longitudinal study of this kind can produce valid data about the effects of community college on the lives of students. The reports resulting from the three-year study were reviewed by a select panel of community college educators who wrote papers describing the implications the study findings have for community college education. The project final report was distributed statewide in the summer of 1982. When this follow-up report was written, it was still too early to know what the impact of the study would be on California community colleges. Additional research is underway to learn more about special populations and to further analyze the data collected in the longitudinal study.

Information Source

Dr. William Morris

Program Evaluation and Approval

California Community Colleges

1238 "S" Street

Sacramento, CA 95814

(916) 445-0486

Analysis of Instructional Apprenticeship Services in Public Schools

Rio Hondo Community College District

Director: Wilbur Lorbeer

Project No. 19-64923-3-9-153 (J) Cost: \$8,000

April 1, 1979 to March 31, 1980

Project Overview

To learn about the current status of apprenticeship services in public schools, questionnaires were mailed to 532 apprenticeship program sponsors, 132 program sponsor

coordinators, and school representatives at 53 community colleges, 29 adult secondary schools, and ten regional occupational centers and programs. Included with the school representative questionnaires were 277 questionnaires for instructors to complete. Information was requested about instructional materials, facilities, finances, management policies and practices, and other aspects of apprenticeship services. Over 43% of the questionnaires were completed and returned. Validation visits were made to 22 representative training sites. The data gathered was analyzed and a report, *An Analysis of Instructional Apprenticeship Services in Public Schools*, was prepared. The report includes a summary of the questionnaire results, a narrative report on the 22 site visits, and evaluation of the instructional materials and facilities available to apprenticeship programs, and recommendations for improving services. Fifty copies were delivered to the State Department of Education and 60 were retained by the college district. An executive summary was provided to the California Apprenticeship Council for dissemination to Joint Apprenticeship Councils statewide.

Follow-Up Findings

The study director reported that the project report was presented and discussed at meetings of state and local apprenticeship councils. The report is said to have helped bring about more attention and understanding for apprenticeship on the part of state staff, who have shown more interest in helping districts understand apprenticeship. However, the study director believes that impact of the report has been reduced because of lack of leadership in this area in the Chancellor's Office, and recommends that the major points contained in the study report be brought to the attention of the Board of Governors.

Information Source

Wilbur Lorbeer

Coordinator of Apprenticeship

Rio Hondo College

3600 Workman Mill Road

Whittier, CA 90608

(213) 692-0921

A Comparative Study of Computerized Career Information Systems

Ventura County Superintendent of Schools

Director: Jim Compton

Project No. 56-10561-3-9-501 (J) Cost: \$19,400

December 1, 1978 to December 31, 1979

Project Overview

The purpose of this project was to evaluate existing computer-assisted career guidance systems for compatibility with California users' needs and to provide this information to the California Occupational Information Coordinating Committee (COICC) as a first step in incorporating a career information delivery system as a part of the California Occupational Information System (COIS). Needs information was obtained from 38 users, including 14 users from secondary schools, five from community colleges, ten from CETA, six from EDD, and three from the Department of

Rehabilitation. Ten computerized career guidance systems were studied for their capability to meet user needs. The report, *A Comparative Study of Career Information Systems As They Relate to Users' Needs*, was prepared and disseminated to the State Department of Education, the Chancellor's Office, and other members of the COICC, and to other agencies in the country interested in computerized guidance systems.

Follow-Up Findings

The program manager of the Personal and Career Development Services Unit of the State Department of Education reported that the study was one of the resources used by the Career Information Delivery System Committee in planning the mandated system. Rather than select one of the ten systems studied, the committee planned the development of a data base that can be used with existing delivery systems, which may or may not be computerized. Because of the changes in the computerized guidance systems since the study, the report is out-of-date today.

Information Source

Dr. Anne Upton
Program Administrator
Personal and Career Development Services
State Department of Education
721 Capitol Mall
Sacramento, CA 95814
(916) 322-6352

Emerging Occupations in Agriculture: Impact Upon Curriculum and People

University of California, Davis
Director: Dr. Orville Thompson
Project No. 57-30023-3-8-819 (I) Cost: \$9,634
June 1, 1978 to May 31, 1979

Project Overview

This research project was conducted to identify competencies needed by workers in new and emerging agricultural occupations in Yolo County, to identify jobs that were on the decline there, to assess barriers to employment of women and minorities and other disadvantaged individuals, and to develop estimates for future employment opportunities in the major agricultural occupations. Interviews were conducted with 100 employers and 200 employees; the data were analyzed and two reports were prepared: *Emerging Occupations in Agriculture: Impact Upon Curriculum and People, Part I* and *Functions and Activities of Agriculture Personnel in Yolo County, California, 1979*. The first was a guideline for vocational instructors who were developing or evaluating curriculum to train workers for entry into a particular job; the second, a guideline which students might use to determine the competencies they must have to enter a particular job or group of jobs. The two reports were sent to the state funding agencies, the California Agriculture Teachers Association curriculum committee, to local agencies, and to the Liaison Committee for Agriculture and Natural Sciences, which included representatives of community college agriculture programs.

Follow-Up Findings

This study was to have been a model for a statewide research effort, but to date this has not occurred. The guidelines have been used as a background for the development of the statewide agriculture curriculum for secondary level programs. As a spin-off, the researchers conducted a nationwide study of women in agriculture programs at all levels of education. The guidelines were also used as a reference by farm advisors in co-op extension and served as a framework for a CETA program at Yuba College to train migrant farm workers.

Information Source

Dr. Orville Thompson
Professor
Applied Behavioral Sciences
University of California, Davis
Davis, CA 95615
(916) 752-2855

Handbook for Developing Competency-Based Curricula for New and Emerging Occupations

San Jose State University
Director: Dr. G. W. Maxwell
Project No. 43-30650-3-9-102 (I) Cost: \$16,698
July 1, 1979 to June 30, 1980

Project Overview

This project resulted in the publication of the *Handbook for Developing Competency-Based Curriculum for New and Emerging Occupations*, a document designed to help vocational education program planners to identify new and emerging occupations and to develop competency-based vocational education curricula for these new occupations. The contents were based on information gathered in a literature search and in interviews with knowledgeable persons. Four hundred copies of the handbook were delivered to the State Department of Education and 100, to the Chancellor's Office.

Follow-Up Findings

Copies of the handbook were mailed to each California community college by the former Chancellor's Office specialist for business education shortly before she was reassigned. She did not have the opportunity to contact local staff and learn how the handbook had been used. No evidence of use was found in contacts made during site visits for this study. The handbook was said to be an excellent resource, but may have limited usefulness at a time when planning for new programs is not a priority.

Information Source

Barbara Sullivan
Specially Funded Programs
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 323-6899

A Study of Recruitment and Retention of Disadvantaged Students in Community College Technical Programs

University of San Francisco

Director: Dr. William Van Burgess

Project No. 8539

(J)

Cost: \$4,131

August 13, 1979 to June 30, 1980

Project Overview

This project was funded to design, develop, implement, and evaluate a pilot program to recruit and retain disadvantaged and limited-English speaking students in technical programs at California community colleges. The project staff were unable to establish an exemplary program as proposed, as community college settings where the program was to be tested were no longer available when the project was funded. However, 25 disadvantaged community college students randomly selected from three basic mathematics and English classes, and 57 bilingual vocational educators enrolled in a masters degree program at the University of San Francisco were surveyed about ways to recruit and retain disadvantaged and LES students; results of this research were reported in the project report which was delivered to the Chancellor's Office.

Follow-Up Findings

The project director has presented information from the study of disadvantaged students to education classes at the University of San Francisco, but no evidence was found of other uses of the research results.

Information Source

Dr. William Van Burgess

School of Education

University of San Francisco

2130 Fulton Street

San Francisco, CA 94177

(415) 666-6551

California Youth Alternatives Project Evaluation

University of California, Davis

Director: Dr. Orville Thompson

Project No. 57-30023-3-9-702

(J)

Cost: \$24,250

January 1, 1979 to May 31, 1980

Project Overview

The purpose of this project was to collect quantitative and qualitative information about the five California Youth Alternatives Project (CYAP) sites which would be useful in planning future youth employment programs. Interviews, questionnaires, site records, and conferences with site personnel were used to gather information about student recruitment and selection, assessment, guidance and counseling, basic skills education, vocational training, and placement. A follow-up questionnaire was mailed to CYAP participants 60 days after the projects terminated. Two evaluation reports were prepared and delivered to the State Department of Education and the Chancellor's Office. *Preliminary Evaluation Report on the California Youth Alternatives Project*, dated November 1979, and the final report, *Evaluation of the California Youth Alternatives Project*.

This report contains information about participant characteristics and outcomes, programmatic strategies used at each site, and recommendations for improving the model and its administration.

Follow-Up Findings

The specialist in the Chancellor's Office to whom the report was delivered said that no use had been made of the information by his unit.

Information Source

George Hall

Specially Funded Programs

California Community Colleges

1122 "S" Street

Sacramento, CA 95814

(916) 323-6899

Evaluation Study of the Outcomes of Vocational Education Special Projects

Cabrillo Community College District

Director: Jack Snyder

Project No. 44-64740-3-9-851

(J)

Cost: \$23,808

June 6, 1979 to September 30, 1980

Project Overview

The purpose of this study was to obtain an evaluation of the performance of 68 vocational education special projects funded by the Chancellor's Office and the State Department of Education under Subparts 3 and 5 of P.L. 94-482 for 1978-79. First, the proposal for each project was reviewed and a one-page description was written; these were published as the *Directory of Subpart 3 and 5 Special Projects, 1978-79*. Then project representatives were interviewed to learn about the progress of each project, and status reports were prepared. Site visits were conducted to 12 projects and the activities of 12 other projects were observed. Final report meetings were held for all projects when they were complete or nearly complete. There, project representatives gave oral reports to panels of vocational educators representing the State Department of Education, the Chancellor's Office, and the California Advisory Council for Vocational Education. Two reports were prepared as a result of this research: *Vocational Education Special Projects in California—Project Summaries*, which contains brief summaries of each project in a form suitable for dissemination, and *Evaluation Study of the Outcomes of Vocational Education Special projects*, which contains a summary evaluation of all projects and recommendations. Both reports were delivered to the two funding agencies.

Follow-Up Findings

Portions of the summary evaluation report were used by state staff in preparing the required accountability report for 1978-79. In June 1982, the Bureau of Publications had not completed publication of the project summaries; it appeared that, if and when the summaries are disseminated, their usefulness will be diminished by this long delay. Experiences gained in the study were used to modify the special project evaluation process used in the following years.

Information Source

Dr. William Morris
Program Evaluation and Approval
California Community Colleges
1238 "S" Street
Sacramento, CA 95814
(916) 445-0486

Strategies for Improving Rural Vocational Education

Planning Associates

Director: John Twomey
Project No. 8533 (J) Cost: \$13,977
August 8, 1979 to June 30, 1980

Project Overview

The outcome of this research project was a list of recommendations for actions at the state level leading to the improvement of vocational education in rural schools and colleges. The recommendations were developed through a survey of occupational deans in 15 rural colleges and vocational educators in their feeder schools, and meetings with the San Joaquin Valley Community College Council for Occupational Education and the Northern California Higher Education Council. A list of 29 needs was developed; these were aggregated into 12 major issues affecting rural vocational education. Those considered most important were the design of the funding allocation, need for an administrator for vocational education at the vice-chancellor level, and need for more flexibility in the way schools can use VEA funds. The issues were described and discussed in the report, *Strategies for Strengthening Rural Vocational Programs*, which was delivered to the Chancellor's Office.

Follow-Up Findings

A representative of one of the rural colleges described several improvements he perceived that were related to the issues identified in the project report. For example, the allocation his college received was larger since the study; there was someone in the Chancellor's Office he could contact about vocational education matters; and rural vocational educators had been asked to assist in planning uses of special project funds. In fact, these outcomes did not result from the study. The allocation formula has not been changed, and the individual who was considered a contact in the Chancellor's Office was hired when another employee retired. The project monitor said that, to his knowledge, no use had been made of the report.

Information Source

Doug Cronin
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

Curriculum Materials

Administration of Justice Curriculum Update

923 Group

Director: Robert Blanchard
Project No. 8530 (C) Cost: \$23,995
May 1, 1979 to June 30, 1980

Project Overview

This project resulted in the review and revision of the administration of justice curriculum used in many California community colleges. Practitioners who were using the curriculum provided input for updating course content and descriptions for five core courses and 14 elective courses. The revised curriculum guide, *Administration of Justice Educational Programs for Community Colleges in California*, was approved by the California Association of Administration of Justice Educators; 1,000 copies were printed and delivered to the Chancellor's Office for dissemination. In addition, 160 copies were distributed to administration of justice programs in California community colleges and universities by project staff.

Follow-Up Findings

The director of the curriculum revision effort believes that the five-core curriculum has been adopted for most of the California community college administration of justice programs, but recognizes that 15-year-old police science courses are still the basis for some programs in the state. He suggests that stronger leadership from the Chancellor's Office will be necessary to bring about more universal use of the curriculum. These perceptions were verified during site visits for this study: the core curriculum had been adopted by two out of four administration of justice program directors interviewed. Lack of a directive from the state or district level requiring use of the curriculum was cited as a reason for not adopting it.

Information Source

Robert Blanchard
Coordinator, Criminal Justice Training Center
Santa Rosa Junior College
1501 Mendocino Avenue
Santa Rosa, CA 95401
(707) 539-5210

Business Education Program Guide: Word Processing, Legal Secretarial, Medical Secretarial, and Banking/Finance Supplements

Ira Nelken and Associates, Inc.

Director: Dr. Ira Nelken
Project No. 8534 (J) Cost: \$32,340
August 13, 1979 to June 30, 1980

Project Overview

Four supplements to the *California Business Education Program Guide* were produced in this project: the *Word Processing Supplement*, the *Legal Secretarial Supplement*, the *Medical Secretarial Supplement*, and the *Banking/Finance Supplement*. Each curriculum guide was based on a task analyses performed by project staff with the assistance of

employers in the four occupational areas. The task analyses were validated by task force groups typically composed of a secondary school teacher, a community college teacher, a regional occupational program teacher, and an employer in the field. The task force groups met in two-day work sessions to discuss performance objectives and strategies for teaching each skill. Their inputs were used by project staff to compile the curriculum guides. Three thousand copies of each guide were delivered to the State Department of Education for dissemination to community colleges, adult schools, regional occupational programs, and high schools.

Follow-Up Findings

Copies of the curriculum guides delivered to the Chancellor's Office were sent to each California community college with a cover letter from the former business education specialist endorsing their use for community college programs. The specialist observed later in site visits that the guides were in use in at least five colleges for beginning or remedial classes. Several business educators contacted during site visits for this study expressed interest in the word processing curriculum, which they had not seen.

Information Source

Barbara Sullivan
Specially Funded Programs
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 323-6899

Fire Science Curriculum Development

San Jose Community College District

Director: Bob Egan

Project No. 43-69658-3-8-199 (C) Cost \$11,000

April 1, 1978 to June 30, 1979

San Mateo Community College District

Director: Jim Meidl

Project No. 41-69054-3-9-352 (J) Cost: \$11,250

February 1, 1979 to June 30, 1980

Project Overview

These two grants funded part of a continuing effort to upgrade fire science curriculum for regional academy programs offered by community colleges throughout the state. The first project resulted in a listing of the minimum performance standards for three career levels in the fire prevention field: Fire Prevention Officer, Fire Prevention Officer I, and Fire Prevention Officer II, and the development of competency-based curricula featuring personalized instruction, continuous progress, self-pacing, and diagnostic activities. It was expected that these standards and curricula would facilitate the entry of women into the field. The materials were prepared with the assistance of an 11-member advisory committee of fire prevention officers and were disseminated to fire service agencies in California and, through the Chancellor's Office and the State Department of Education, to community college and secondary level fire service educators.

In 1979-80, practitioner committees refined or developed competency-based minimum standards for the career levels

Fire Prevention Officer I and II, Fire Instructor I, II, and III, Fire Officer, Fire Investigator, Fire Mechanic I, and Fire Fighter III. New or revised curriculum modules were prepared for Fire Prevention Officer, Fire Command, Fire Instructor, and Fire Management instruction. The completed modules were assigned to the State Fire Academy or to regional academies. Four copies of the products were delivered to the Chancellor's Office for dissemination to community college fire science programs, the materials were also to be duplicated and sold by the State Fire Academy. At least 12 community colleges had made use of these products by the end of the funding period.

Follow-Up Findings

The curriculum materials were reported to be in use in regional academy programs throughout the state. Instructors in charge of four of these programs responded to inquiries about their uses of the products. While several recognized that there were still weaknesses in the materials, they also said there were excellent components and praised the continuing effort to improve the curriculum. In 1981-82, Los Medanos College received a grant to develop additional courses and establish a 12-course regional academy model with the cooperation of other San Francisco Bay Area colleges.

Information Source

Jim Meidl
State Fire Academy
836 Asilomar Boulevard
Pacific Grove, CA 93950
(408) 646-6240

Health Careers Curriculum Development

Solano County Superintendent of Schools

Director: Dr. James Becket

Project No. 48-10488-3-8-827 (J) Cost \$25,634

April 1, 1978 to June 30, 1979

Project Overview

In this project, teams of community college and secondary school instructors developed competency-based curriculum guides for four health careers: medical assistant, dental assistant, nursing assistant, and hospital occupations. Approximately 100 copies of the preliminary guides were distributed in conjunction with an inservice workshop. Production of finalized versions of the guides and inservice training in their use was funded under a 1979-80 Subpart 3 grant. Learning activity packages for use with the guides were developed in the project described next.

Follow-Up Findings

Community college health educators who responded to follow-up inquiries said that they either had not seen the health career curriculum modules or that they did not use them. They indicated that they have their own curriculum materials developed for their courses.

Information Source

Jean Clawson
Program Evaluation and Approval
California Community Colleges
1238 "S" Street
Sacramento, CA 95814
(916) 445-0486

Learning Activity Packages for Health Occupations

Riverside County Superintendent of Schools

Director: Vivian Bender

Project No. 33-10330-3-0-304 (J) Cost: \$9,845
October 1, 1979 to June 30, 1980

Project Overview

Twelve learning activity packages (LAPs) and instructors' packets were produced for use with curriculum guides developed by the project described above for dental assistant, medical assistant, nursing assistant, and hospital occupations. Writer consultants, who were also involved in developing the curriculum guides, recruited qualified professionals to act as advisors. Topics were selected for the LAPs which could be used by most health occupations instructors; e.g., nutrition, metrics, hand washing, grooming, pulse and respiration, and so on. The LAPs were field tested in eight classes, revised, published, and 150 sets were distributed to teachers and administrators at the June 1980 state conference of health educators. Master copies were given to State Department of Education staff, who were to make copies available to LEAs.

Follow-Up Findings

The LAPs have been published by the Bureau of Publications. However, no evidence was found that these materials were in use in community college health occupations programs, except occasionally as library resources. Nine instructors in different health career areas who responded to inquiries about the materials indicated that they were too elementary for general use in their college-level programs. This was verified by the Chancellor's Office specialist for health careers education. A few instructors who kept LAPs on hand for student reference said that the materials were used infrequently.

Information Source

Jean Clawson
Program Evaluation and Approval
California Community Colleges
1238 "S" Street
Sacramento, CA 95814
(916) 445-0486

Consumer Education Audiovisual Mini-Units

Sierra Joint Community College District

Director: Martin Jack

Project No. 31-66936-5-9-977 (C) Cost: \$20,000
February 1, 1979 to June 30, 1980

Project Overview

This grant supported the completion of three audiovisual mini-units in consumer education that were intended for

use in any community college occupational program. An experienced production group was employed that prepared three scripts and one finished slide program; however, the materials were considered to be of unacceptable quality for distribution. A second production group produced a single slide-tape, "Buying Time," with the remaining funds. The program presents the concept that consumer education is an integral part of vocational education and that each person has the dual responsibility of quality production as a producer and effective selection and use of products as a consumer. The slide-tape program was delivered to the Chancellor's Office.

Follow-Up Findings

The production was shown to participants at a consumer and homemaking education conference, but no evidence was found of other use of the materials except at the originating college. The project coordinator had received a few requests for the slides from other colleges and had referred these to the Chancellor's Office, but did not know if the materials were obtained. The study team could not locate a copy of the presentation at the Chancellor's Office or in the state vocational education resource center, VOICE.

Information Source

Bettye Nippert
Specialist, Consumer and Homemaking Education
Sierra College
5000 Rocklin Road
Rocklin, CA 95677
(916) 624-3333

Home Decorating and Furnishings Occupations Curriculum Guide

San Mateo County Office of Education

Director: Mary Conway

Project No. 41-10413-3-9-411 (J) Cost: \$10,574
January 1, 1979 to June 30, 1980

Project Overview

In this project, a field-tested manuscript of the *Home Decorating and Furnishings Occupations Curriculum Guide* was edited, typeset, and 2,000 copies were printed. Three inservice workshops in the use of the guide were conducted for a total of 56 participants, including one community college faculty member. Copies of the curriculum guide were mailed to all secondary, community college, and university home economics department heads in California and to home economics supervisors in other states.

Follow-Up Findings

Several community college home economics educators were contacted during site visits in this study who had received copies of the *Home Decorating and Furnishings Occupations Curriculum Guide*; one of the contributing writers, an instructor at Orange Coast College, was also interviewed. These educators agreed that the guide was designed primarily for use in secondary education programs. However, each described ways that she had used portions of the guide, such as the glossary or appendix materials, as resource materials in her teaching.

Information Source

Mary Conway
Regional Supervisor
Vocational Education Coastal Regional Office
1111 Jackson Street Room 4064
Oakland, CA 94607
(415) 464-0955

Curriculum for Training Wastewater and Water Treatment Plant Operators

Contra Costa Community College District, Contra Costa College

Director: Kenneth Jackson

Project No. 07-61689-3-8-436 (C) Cost: \$39,238
May 19, 1978 to May 30, 1979

Project Overview

This project resulted in the development of a master program curriculum and one module for a two-year, standardized program leading to an A.S. degree in water and wastewater technology. The curriculum materials were developed with the aid of Remcon, Inc., the Joint Education Committee of the California Section of the American Waterworks Association, and the California Water Pollution Control Association. An instructor's Manual and student guide for the course, "Wastewater Treatment I," were sent to each California community college and to water treatment plants and wastewater treatment plants throughout the state. The program was presented to educators and industry representatives at three regional conferences.

Follow-Up Findings

Curriculum modules for additional courses in the wastewater treatment program were not developed. The first module was used in the program at Contra Costa College until 1982, when the class was no longer offered because of lack of demand. The director explained that licensing and hiring policies in the industry discouraged enrollment in a two-year program, and that most of the training currently provided is to upgrade workers already employed in this field. No evidence was found that the first course module was in use elsewhere.

Information Source

Kenneth Jackson
Associate Director, Technical and Industrial Education
Contra Costa College
2600 Mission Bell Drive
San Pablo, CA 94806
(415) 347-9077

Media and Curriculum Development for the Handicapped

North Orange County Regional Occupational Program

Director: Dr. Roger Cox

Project No. 30-74104-3-9-751 (J) Cost: \$31,410
July 1, 1979 to October 31, 1980

Project Overview

This project resulted in the development of 25 multimedia curriculum modules for training handicapped students

in automotive, construction, graphics, horticulture, manufacturing, medical, office, product/public service, and retail occupations. The modules were intended to be models or examples of successful curriculum segments in a course, rather than a comprehensive curriculum for each course. Each module was developed for students with one or more specific handicapping condition. Five additional modules were designed to train paraprofessionals for special education in vocational settings and to assist in career awareness. Two complete copies of the multi-media modules were delivered to the State Department of Education to be used in further dissemination.

Follow-Up Findings

Since the project ended, the materials have received infrequent use at North Orange County ROP because only a few disabled persons have enrolled in the classes for which they were developed. A master set is available from the state vocational education resource center, VOICE, but records are not kept which show whether or not any of the modules have been checked out. Project staff reported receiving a few requests for the materials, which they referred to VOICE. Participating ROP staff who were interviewed indicated that the experience of developing the materials made them more sensitive to the needs of handicapped students and helped them improve their instruction for other students as well.

Information Source

M.L. Oxford
Guidance Center
North Orange County ROP
2360 West La Palma Avenue
Anaheim, CA 92801
(714) 776-2170

Gender Equity Resources

Fostering Sex Fairness in Vocational Education

Steiger, Fink & Kosecoff, Inc.

Director: Betty Houser

Project No. 8003 (J) Cost: \$48,790
July 3, 1978 to June 30, 1979

Project Overview

This project was to (1) establish a statewide network for exchange of information on sex equity activities; (2) establish a means for providing information and assistance to interested parties on sex bias and discrimination grievances; and (3) prepare an annual evaluation of efforts to eliminate sex bias, stereotyping, and discrimination in vocational education in California. VEEP and other sex equity projects were contacted; a bi-monthly newsletter on sex equity activities was published and 2,500 copies were distributed; and a telephone hotline was established and legal assistance referrals to Equal Rights Advocates were made. Four thousand copies of a grievance handbook, *What to Do With Your Grievance*, were made available. The project final report, *Fostering Sex Fairness in Vocational Education*, contains a report on the information network, a review of the *California Five-Year State Plan for Vocational Education* and federal mandates, results of the evaluation of

activities to foster sex equity in vocational education, and recommendations for actions to improve sex fairness in vocational education.

Follow-Up Findings

The Chancellor's Office gender equity coordinator was asked for her impressions of the impact of the Steiger, Fink, and Kosekoff report. She evaluated this document as "the most thorough analysis to date of sex equity needs in California community colleges" and pointed out that the report contains insightful recommendations, many of which are still valid today. Some of these have been or are being addressed: the need for inservice training to create awareness of sex equity issues, and the need to have someone assigned as gender equity coordinator at the state level, for example. Other recommendations have not been addressed in an organized manner: evaluation data, for example, have not been compiled in a consistent fashion over the years, consequently longitudinal data are not readily available for describing and evaluating long-range changes in enrollments, or outcomes of gender equity activities, or changes in attitudes of vocational educators. Likewise, an information exchange network, like the one established by this project, has not been maintained.

Information Source

Allene Murdoch
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

A Study of Vocational Enrollments in Terms of Sex and Racial Balance

Ira Nelken and Associates, Inc.

Director: Dr. Ira Nelken

Project No. 8535 (J) Cost: \$18,750
August 9, 1979 to June 30, 1980

Project Overview

The purpose of this project was to obtain baseline data against which progress toward sex equity in vocational education could be measured and to devise strategies to accomplish sex and racial balance. Statistical tables showing male and female participation in vocational education were developed from data collected on forms VEA 45, 47, and 48 for 1977-78. Concurrently, 130 on-site and telephone interviews were conducted with local practitioners to validate the state's data and to collect information about reporting procedures and services provided to women and minority students. A project task force studied the findings and made recommendations for ways to improve the data collection system and to increase the number of women and minorities in vocational programs and employment. Results were reported in *Overcoming Sex and Racial Imbalance in Vocational Education*: 350 copies were delivered to the Chancellor's Office and 500 copies to the State Department of Education.

Follow-Up Findings

This report has had less use by gender equity project directors surveyed than any of the other gender equity resources studied: only two of the 11 directors knew about the report and only one had used it, as a reference in a resource library. Recommendations in the report may have reinforced decisions at the state level to modify data collection procedures; some of these changes were underway when the report was published. Other recommendations may have supported plans for assisting nontraditional and minority students; for example, a number of special projects have been funded recently by the Chancellor's Office to provide basic skills instruction, as recommended in the report. No comparisons have been reported of the baseline data obtained for this study with more recent statistics on community college vocational enrollments.

Information Source

Allene Murdoch
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

Resource Bank for Overcoming Sex Bias and Stereotyping in Vocational Education

Minority Affairs Institute, Inc.

Director: Alba Moesser

Project No. 8081 (J) Cost: \$18,927
December 4, 1978 to June 30, 1979

Project Overview

In this project, staff gathered information about gender equity resources from organizations, other projects, and institutions in California that were involved in vocational education, the needs of women, and sex discrimination. They also reviewed existing data banks of printed matter. The information gathered was categorized, cross referenced, and published in the document, *Resource Bank for Overcoming Sex Bias and Stereotyping in Vocational Education*. Copies were distributed to each community college.

Follow-Up Findings

The *Resource Bank* was publicized and disseminated by the gender equity projects, VEEP and CC-Page. Five out of 11 directors of other gender equity projects who were contacted in this study knew about the resource, three had copies in their libraries; and one director said she had used the *Resource Bank* for obtaining materials for the library and for her sex equity files. Because of the number of new resources available since this document was compiled, it should be revised and updated.

Information Source

Allene Murdoch
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

Research to Identify, Analyze, and Disseminate Information About Opportunities for Males and Females in Nontraditional Occupations

CARVELL Education Management Planning, Inc.

Director: Fred Carvell

Project No. 8084 (J)

Cost: \$21,500

April 1, 1978 to June 30, 1979

Project Overview

Data on employment patterns and enrollment in vocational programs were gathered and analyzed to identify nontraditional occupations and training programs for men and women. Interviews were conducted in 20 secondary districts, six community colleges, four regional occupational programs, 15 special projects, and with 20 employers or employment-related agencies to gather input on the self-image of the nontraditional employee, life on-the-job as it relates to co-workers, and preparation for nontraditional employment. The information gathered was used to compile *Choices and Challenges—A Student Guidebook About Nontraditional Career Opportunities*. The publication was designed for use by secondary and community college students and adults who were considering a nontraditional career. Three hundred copies were delivered to the project monitor, along with the original and a camera-ready brochure for announcing availability of the publication.

Follow-Up Findings

Choices and Challenges was published by the Bureau of Publications and can be purchased from that agency. The copies supplied by the contractor were disseminated through the gender equity projects, CC-PAGE and VEEP. *Choices and Challenges* was the most widely known and used of the gender equity products studied, as measured by the responses of gender equity project directors surveyed. Eight of the 11 directors knew about the resource and six had used materials from the student guidebook in presentations, or reproduced portions of the document for dissemination, or used exercises or other ideas from the book. The guidebook was also placed in career center libraries for use by students. The Chancellor's Office gender equity coordinator considers this to be "one of California's best gender equity products for postsecondary students."

Information Source

Joan Carvell

CARVELL Education Management Planning, Inc.

P.O. Box 531

Los Altos, CA 94022

(415) 941-9118

Strategies to Recruit and Retain Students for Nontraditional Programs and to Assure Program Completion and Placement

CARVELL Education Management Planning, Inc.

Director: Fred Carvell

Project No. 8536 (J)

Cost: \$23,945

July 1, 1979 to June 30, 1980

Project Overview

The purpose of this project was to develop a set of strategies for recruitment and retention of students in community

college programs nontraditional to their sex, and for improving job placement services available to these students. Enrollment statistics for 1977-78 were used to identify 91 vocational programs with more than 80% of one gender enrolled. A sample of 12 community colleges that were known to be attempting to serve nontraditional students were visited, and nearly 180 administrators, instructors, counselors, and placement personnel were interviewed. Over 500 students in 28 imbalanced vocational classes were surveyed to learn about their characteristics and needs. The information collected was used to prepare *Options and Opportunities, A Community College Educator's Guidebook for Nontraditional Vocational Program Improvement*; 150 copies were delivered to the Chancellor's Office.

Follow-Up Findings

This resource and its companion report, *Choices and Challenges*, received more use by gender equity project directors surveyed than any of the other gender equity resources studied. Seven of 11 directors who responded to inquiries about their use of gender equity products knew about *Options and Opportunities* and five had used information in the resource in a newsletter for instructors, to develop ideas for ways to broaden enrollments in imbalanced programs, or as a reference for presentations to college staff and community members. Copies of the resource were mailed to each community college; others were distributed by the community college gender equity project, CC-PAGE. The resource is in the library of the Ohio State Center for Research in Vocational Education and the Central State Curriculum Center and is listed by the Far West Laboratory for Educational Research and Development as a resource for women's studies.

Information Source

Joan Carvell

CARVELL Education Management Planning, Inc.

P.O. Box 531

Los Altos, CA 94022

(415) 941-9118

Materials for Training Vocational Education Administrators in the Elimination of Sex Bias

Equal Rights Advocates, Inc.

Directors: Donna Hitchens, Ann Thomas

Project No. 8101 (J)

Cost: \$19,518

January 1, 1979 to December 31, 1979

Project Overview

Project staff wrote and published a handbook, *Eliminating Sex Bias in Vocational Education. A Handbook for Administrative Personnel*, developed workshop materials, and conducted test workshops in Sonoma County and for the Pittsburg Unified School District. When the contractor's office was arsoned in September 1979, the handbook manuscript was destroyed. The manuscript was reconstructed, but the contractor could not complete the portion of this contact which called for statewide inservice workshops.

Follow-Up Findings

The handbook was printed by the Bureau of Publications and disseminated by the Vocational Education Equity

Project. The Chancellor's Office gender equity coordinator evaluated the document as an appropriate resource for project directors who were developing women's programs. In fact, seven out of 11 gender equity project directors surveyed were acquainted with the publication; five had used it as a reference for community presentations, inservice, or report writing, or as a library resource available for others.

Information Source

Allene Murdoch
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

Materials for Community Groups on Sex Bias in Vocational Education

Equal Rights Advocates, Inc

Director Donna Hitchens

Project No 8100 (1) Cost: \$18,880
January 1, 1979 to December 31, 1979

Project Overview

Project staff wrote and published the handbook, *Eliminating Sex Bias in Vocational Education: A Handbook for Community Groups*, developed workshop materials, and conducted test workshops. When the contractor's office was arsoned in September 1979, the handbook manuscript was destroyed. The manuscript was reconstructed, but the contractor could not complete the portion of the contract calling for statewide inservice workshops.

Follow-Up Findings

The handbook produced in this project has apparently had infrequent use to date by community college directors of gender equity programs. Only three out of 11 contacted in this study knew about this publication and only one had used selected materials from it. The resource was characterized by the Chancellor's Office gender equity coordinator as very basic in its approach to stating what the law is in respect to sex equity, and in its recommendations to community groups. The information was said to be accurate, but sketchy and not particularly well organized.

Information Source

Allene Murdoch
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445-0102

Counseling Materials to Promote Sex Equity in Vocational Education

Los Rios Community College District, American River College

Director Ron Kong

Project No. 34-67371-3-9-552 (1) Cost \$17,280
May 1, 1979 to June 30, 1980

Project Overview

This project resulted in the development of five slide-tape programs and five brochures which present general

information about sex equity in apprenticeship and specific information about four apprenticeship occupations. The slide-tape programs are "The World of Apprenticeship," "Carpenters," "Auto Mechanics," "Operating Engineers," and "Culinary Occupations." A brochure was produced for each of these four occupations and a fifth brochure was published that describes the sex equity provisions of the Vocational Education Amendments of 1976. The materials developed, along with two publications purchased by the project, *Expanding Adolescents' Role Expectations* and the *Resource Bank for Overcoming Sex Bias and Stereotyping in Vocational Education*, were distributed with support from the Vocational Education Equity Project to secondary and community college districts.

Follow-Up Findings

Eight of the 11 gender equity project directors surveyed in this study knew about the slide-tapes and five had used the materials in career centers, career exploration classes, community outreach presentations and other workshops, or for individual student viewing. Respondents who used the materials said they were excellent. These were the only audiovisual products in the study for which evidence was found of use outside of the originating institution. The fact that sufficient copies were made so that colleges could own sets of the materials and users did not have to borrow them from the Chancellor's Office or the developer, must-have contributed to their relatively widespread use.

Information Source

Dr. Barbara Peterson
Library Building Room 281
California State University, Fullerton
State College Boulevard and Nutwood
Fullerton, CA 92634
(714) 773-3141

Vocational Guidance and Counseling Materials

Adult Career Planning Inventory

San Bernardino County Superintendent of Schools

Director: Robert Ciauri

Project No. 36-10363-3-8-913 (1) Cost: \$23,480
April 1, 1978 to June 30, 1979

Project Overview

The Adult Career Planning Inventory (ACPI), an eight-page career planning assessment instrument, was completed in this project. A data processing program was also written which prints out a Career Planning Profile, listing the client's responses on the ACPI, plus *Dictionary of Occupational Titles* information for occupations chosen by the individual and for occupations picked by the computer as other possibilities to explore. An *Administration and Interpretation Guide* was also developed. The ACPI was field tested at agencies in San Bernardino and Riverside Counties, including San Bernardino Valley College, College of the Desert, Mt. San Jacinto College, and Chaffey College.

Follow-Up Findings

In 1980, additional VEA project funds were used to publish and disseminate the Adult Career Planning Inventory. Seven community colleges requested and received

196

packets of the ACPI materials. The inventory was incorporated into a computerized occupational assessment program developed at Santa Monica College with VEA project funds in 1980-1982. Other colleges contacted for this study had difficulty arranging for the necessary computer processing and found that other tests or career planning systems already available to them performed essentially the same functions.

Information Source

Robert Ciuri
Coordinator, Guidance and Career Education
San Bernardino County Superintendent of Schools
602 South Tippecanoe Avenue
San Bernardino, CA 92415
(714) 383-1352

Improved Vocational Guidance Programs for LES/NES, Out-of-School Youth, and the Gifted

Ceres Unified School District

Director: Jack Rudd

Project No. 50-71043-3-9-503 (I) Cost: \$33,200
April 1, 1979 to June 30, 1980

Project Overview

The purpose of this project was to produce a vocational guidance handbook for secondary and community college personnel throughout California who work with limited- and non-English speaking youth, out-of-school youth, and gifted students. Project staff conducted a literature review, interviewed students in each target group, the students' parents, and other knowledgeable individuals, and reviewed model programs. Findings were presented to ad hoc advisory committees who recommended strategies to meet the identified needs of each group. Their recommendations and other documents were incorporated into three vocational guidance handbooks. *Opening Doors for the Limited- and Non-English Speaking Student, Opening Doors for Out-of-School Youth, and Opening Doors for the Gifted.* Approximately 150 sets of the handbooks were distributed to secondary school and community college counselors at workshops in San Diego, Los Angeles, and Modesto.

Follow-Up Findings

The project director identified 14 community college counselors who attended the dissemination workshops and received copies of the guidance handbooks. Inquiries were mailed to each counselor. Only one replied, who said that she had used the materials and shared them with other counselors.

Information Source

Jack Rudd
Coordinator of Vocational Education
Ceres Unified School District
P.O. Box 307
Ceres, CA 95307
(209) 538-0150

Vocational Guidance Resource Handbook

Minority Affairs Institute, Inc.

Director: Anthony Sancho

Project No. 8531 (I) Cost: \$11,351
November 28, 1979 to June 30, 1980

Project Overview

In this project, a vocational guidance handbook containing information about resource materials on minorities, the disadvantaged and handicapped, and sex equity was prepared. Five professional counselors were trained to use the handbook. They, in turn, assisted local practitioners in their districts to use the resource. Participants identified in the project report were from secondary education with the exception of one community college career center director.

Follow-Up Findings

The guidance handbook was delivered to the state monitor for publication, but copies were not printed. The monitor indicated that, although state staff attempted to have the quality of the product improved, the material received from the contractor was not considered useful enough to warrant publication.

Information Source

Stan Greene
Personal and Career Development Services
State Department of Education
721 Capitol Mall
Sacramento, CA 95814
(916) 322-6352

PROJECTS RESULTING IN SERVICES

Occupational Data Services

Data for the Allocation Formula and Vocational Education Reports

Chancellor's Office, California Community Colleges

Director: Charles McIntyre

Project No. 8412 (C) Cost: \$108,053
November 1, 1978 to June 30, 1979

Project Overview

These funds were claimed by the Analytical Studies Unit of the Chancellor's Office for accomplishing two separate tasks. \$13,553 were used to obtain income differential information for use in calculating district VEA allocations, and \$94,500 for developing an occupational education reporting component for the Chancellor's Office automated data management system. For the first task, the Analytical Studies Unit contracted with the State Franchise Tax Board to compile data on family size and income for two years. It was proposed that this information might be substituted for census data in directing VEA allocations toward concentrations of low income families, as required by federal law.

The remaining funds were awarded to Sierra Joint Community College District. Personnel there worked with Chancellor's Office staff and representatives of other community

colleges to design and test a system for reporting and processing occupational education data. The design process involved determining the state-level needs for occupational data, coordinating the Chancellor's Office system with other federal and state systems, such as COIS, EDD, SAM, and the like, making the necessary ties between various coding taxonomies use to classify vocational education programs and occupations (supply and demand), and linking vocational programs and courses. Computer programs were written to combine and store data in the Chancellor's Office Information System and to generate state-level vocational education reports. The system was field-tested initially at Santa Ana College in July 1979. Three supporting products were prepared: the *Occupational Education Reporting System Operators Manual*, which contains instructions to district personnel for collecting and reporting data, the *Technical Manual*, which contains the computer programs and related information, and a *Taxonomy of Programs*, which cross references the different coding systems used to identify vocational programs and occupations. These materials were made available to all California community colleges.

Follow-Up Findings

In the present allocation formula, data from the Franchise Tax Board are not used to identify concentrations of low-income families; census data are used for this purpose. The development of the Occupational Education Reporting System is a continuing activity, revisions have been necessary, for example, to accommodate new federal vocational education data system (VEDS) requirements. The practice introduced with the occupational education reporting system of reporting vocational education data on machine-readable tape, rather than as hard copy, has been adopted by about one-third of the colleges, which greatly facilitates processing of the data at the state level.

Information Source

Dr. William Boakes
 Program Evaluation and Approval
 California Community Colleges
 1238 "S" Street
 Sacramento, CA 95814
 (916) 445-0486

Development of a California Occupational Information System

*Ventura County Superintendent of Schools
 Directors: John Van Zant, Jim Compton*

*Project No. 56-10561-C-8-010 (I) Cost: \$125,000
 September 1, 1977 to December 31, 1978*

*Project No. 56-10561-3-8-020 (I) Cost: \$50,000
 December 1, 1977 to September 30, 1978*

*Project No. 56-10561-3-8-030 (I) Cost: \$39,478
 December 1, 1977 to June 30, 1978*

*Project No. 56-10561-3-9-201 (I) Cost: \$99,276
 December 1, 1978 to June 30, 1980*

Project Overview

Four grants were awarded in 1977 and 1978 to the Ventura County Superintendent of Schools to support the

development and refinement of an occupational data management system for California. The first grant was for the maintenance and development of the California Manpower Management Information System (CMMIS), which had received VEA funds under the previous Vocational Education Amendments. The new legislation requires the state to establish a California Occupational Information Coordinating Committee (COICC) and to implement a California Occupational Information System (COIS). The Coordinating Committee, composed of representatives of the State Department of Education, the Chancellor's Office, the Department of Rehabilitation, EDD, and the California Employment Training Council, agreed that the CMMIS would become the COIS, to be jointly supported by the five agencies. The remaining three grants made up the Chancellor's Office share of the cost of further development of COIS.

During this period, project staff produced computer programs and reports required for the *California Five-Year State Plan for Vocational Education* and for the required annual plans and accountability reports. A number of other products were also prepared: these included supply/demand reports, the *Student Accounting System*, the *Vocational Education Interim Crosswalk*, a *Task Analysis Manual*, and the *Vocational Education Operations Analysis Process*. Near the end of the last funding period, the project director left to accept another position, and project staff elected to no longer serve as the COIS contractor. The remainder of the work done with project funds was directed toward developing a system and education-oriented products for use by the State Department of Education and the Chancellor's Office. Products produced by the Ventura County staff were delivered to the State Department of Education.

Follow-Up Findings

In 1979-80, the Ventura County staff continued to prepare statistical reports for the *Annual State Plan and Accountability Report* with joint funds totaling \$50,000 from the State Department of Education and the Chancellor's Office. The Ventura staff also did additional planning for a data management system for the State Department of Education under a grant from that agency. In 1980-81, the Chancellor's Office contributed \$50,000 to the COICC as its share for the development of a mandated career information component of COIS. There has been no concerted effort to disseminate the products of the Ventura projects to local agencies or to provide inservice in their use. To date, the expenditures for the development of COIS have had very little impact in the California community colleges, except indirectly through state-level compliance with legislated mandates and certain reporting requirements.

Information Source

Roland Boldt
 Administrator
 Vocational Education Support Services
 State Department of Education
 721 Capitol Mall
 Sacramento, CA 95814
 (916) 445-8758

Procedures to Utilize Student Follow-Up Information (SAM) in Course and Program Modification

Los Angeles Community College District, Los Angeles City College

Director: Dr. Ben Gold

*Project No. 19-64741-3-9-152 (C) Cost: \$40,119
March 1, 1979 to February 28, 1980*

Project Overview

In this project, a survey was conducted of all California community colleges to learn about current uses of SAM (Student Accountability Model). Exemplary uses that were somewhat unique and that had been developed to a point where they were ready to share were identified at 14 colleges that were willing to commit time to a transfer process. Brief descriptions of the 14 exemplary practices were sent to all community colleges in the state, and applications were solicited from colleges wishing to adopt or adapt practices. The transfers of nine practices were arranged. A manual, *SAM. Fourteen "Exemplary" Uses and How to Apply Them in California Community Colleges*, was produced and several copies were sent to each community college to be distributed to professionals involved in the implementation of SAM. The nine trainee institutions indicated that the transferred practices would be implemented on these campuses within the next two years.

Follow-Up Findings

Representatives of five of the adopting colleges responded to follow-up inquiries two years after the training sessions. One said the exemplary practice had been implemented, resulting in improved follow-up procedures, record keeping for program compliance, and VEA budget records. Two said the practices they investigated had not been implemented, but that they hoped to implement them in the near future. Two had found that the practices they planned to adopt were impractical for their applications. In 1981, information about significant improvements in SAM collected in the 1979 survey was incorporated into a revision of the *SAM Operations Manual*.

Information Source

Dr. William Morris
Program Evaluation and Approval
California Community Colleges
1238 "S" Street
Sacramento, CA 95814
(916) 445 0486

Guidance and Counseling Services

EUREKA: The California Career Information System

Richmond Unified School District

Director: Patrick Halligan

*Project No. 07-61796-3-8-817 (J) Cost: \$126,230
May 5, 1978 to June 30, 1979*

Project Overview

This grant funded continued development of the California Career Information System (EUREKA). The data

base was expanded, training sessions were conducted at all sites (nine four-year colleges and universities, 32 community colleges, 40 high schools, and ten agencies); a counselor's handbook on how to implement EUREKA, two slide-tape shows, and other user materials were produced, three newsletters were published and mailed to over 800 users and interested non-users; and 50 demonstration workshops were conducted statewide.

Follow-Up Findings

When the VEA funding expired, EUREKA staff continued the service with user fees and donated space, time, and equipment. In 1982, with a \$211,000 annual budget, the no-frills operation cut fees to compete with systems marketed by a major publisher and another large corporation. EUREKA was used 5,254 times on community college campuses in 1980-81, and was installed on at least 50 campuses by May 1982. The system is extremely user-oriented; staff provide on-site training, hold user conferences twice a year, and meet regularly with a user group advisory committee. Modifications and expansions are made continuously in response to user needs. Recent additions are a microcomputer version and addition of nationwide school information to the data base. As this philosophical commitment to the customer is recognized by more non-users, such as community colleges that have not adopted the system because of perceived shortcomings that have already been corrected, the continued success and growth of EUREKA seems likely. It is also significant that EUREKA staff have been contracted to assist the California Occupational Information Coordinating Committee in the development of data for the state career information system mandated by federal and state law.

Information Source

Marilyn Maze
Director
EUREKA
5625 Sutter Avenue
Richmond, CA 94804
(415) 524-4976

Implementation of a Statewide Personal and Career Development Plan for Vocational Education

California State Department of Education

Director: Dr. Anne Upton

*Project No. 60-10000-3-8-831 (J) Cost: \$149,411
March 1, 1978 to June 30, 1979*

*Program Revision Proposal (J) Cost: \$136,000
August 1, 1979 to June 30, 1980*

Project Overview

Two grants provided funds for the Personal and Career Development Services unit of the State Department of Education to assist in the development of vocational guidance components, to provide inservice in vocational guidance to state and local personnel, to establish a system for collecting information on noteworthy vocational guidance practices and expand the State Department of Education dissemination system to include vocational guidance materials, and to establish elementary, secondary, and adult school

demonstration sites with pilot vocational guidance programs. A portion of the grant was used each year to fund a position in the Chancellor's Office for a career guidance specialist. In the spring of 1979, with the assistance of Personal and Career Development Service staff, he presented five regional three-day workshops to train 39 community college counselors as master trainers in career counseling techniques.

In 1979-80, the career guidance specialist continued to assist the master trainers as they worked with other community college counseling staff. During the year, the specialist and his colleagues in the State Department of Education directly assisted 63 schools or districts with their career guidance programs; nine other LEAs were assisted by the trained consultants. Assistance was provided to VEA Subpart 3 guidance and counseling special projects. A final draft of the *Guidelines for Developing Comprehensive Guidance Programs in California Public Schools. Kindergarten Through Adult School* was prepared and delivered to the state printer. Inservice workshops were conducted for 1,300 educators to improve their skills in planning, implementing, and evaluating vocational guidance programs. Materials were identified and added to the collection of the Career Education Dissemination Center System. Project staff also participated in a review of counselor credentialing requirements, planning for a statewide career information system, and inservice for pupil personnel trainers (see page 79).

Follow-Up Findings

The master trainers continue to train community college staff in 1981-82, for example, several of these individuals participated in a VEA special project at Moorpark College as presentors for regional career counseling workshops. The career guidance specialist was retained as a member of the Chancellor's Office staff and has continued to serve as a highly-regarded monitor of community college VEA-funded guidance and counseling projects.

Information Source

Dr. James Hirschinger
College Services
California Community Colleges
1122 "S" Street
Sacramento, CA 95814
(916) 445 0102

Dissemination Services

California Statewide Dissemination System for Vocational Education (VOICE)

Chancellor's Office, California Community Colleges, and the State Department of Education

Directors. Dr. William Morris, Dr. Robert Darling
Project No. 60 10000 3 8-828 (1) Cost: \$64,446
April 1, 1978 to June 30, 1979

Project Overview

This grant funded the first year of a five-year plan to develop a statewide dissemination system for vocational

education information. The objectives were to establish systems for intake, screening, and classification of documents, for managing the data base, for assessing information, and for processing requests for information; to establish procedures for creating awareness of products and services and training for users, to unify the fragmented dissemination activities currently operated through the State Department of Education, the Chancellor's Office, county offices, and local districts and community colleges, and to establish a master center and management procedures. This grant and subsequent efforts resulted in the consolidation of VERIC, SHARE, BEDDS, and other resource libraries into the present dissemination center, VOICE.

Follow-Up Findings

VEA support for VOICE has been continued with funds from the administration budget of the Research Coordinating Unit of the State Department of Education. In May 1982, the center maintained a computerized catalog of 5,192 titles and provided, free of charge, computerized searches of this collection, ERIC, and other major resource centers. In 1981-82, VOICE distributed over 11,000 pieces of free materials and answered over 2,100 specific requests for materials. California community college personnel have not made much use of VOICE, however: only 3% of these requests came from community colleges. It appears that many college educators do not know about the service one out of three persons interviewed on campuses during the impact study did not know what VOICE was and only one in six had used the service. Those who had used VOICE thought it was an excellent service.

Information Source

Nona Verloo
VOICE
State Department of Education
721 Capitol Mall 4th Floor
Sacramento, CA 95814.
(916) 445-0404

Vocational Education Productions: Instructional Materials for Agriculture Education

California Polytechnic State University Foundation

Director: Eduardo Apodaca

Project No. 8104

(1)

Cost: \$42,500

April 1, 1978 to June 30, 1979

Project Overview

This grant to Vocational Education Productions, an educational service of California Polytechnic State University Foundation, resulted in the production and field testing of eight filmstrips and five slide sets that address the curriculum needs of secondary and community college vocational agriculture classes. Included were slide sets on ornamental horticulture, plant identification, and livestock judging, and filmstrips on dairy goat production, artificial insemination of beef and dairy cattle, opportunities in resource law enforcement, fitting and showing dairy heifers, and management of farm personnel and agricultural cooperatives. The products were listed in the Vocational Education Productions Agriculture Field Notes Newsletter and in the VEP instructional materials catalog.

Follow-Up Findings

The materials are still included in the Vocational Education Productions catalog, along with hundreds of other instructional items produced by the agency. The catalog is mailed each year to 2,400 agriculture educators in the state, nation, and in other countries. An estimated average of about 60 of each of the items produced under the grant were sold in 1980-81. All of the community college agriculture instructors interviewed in this study were familiar with the production service and had used VEP materials as instructional resources.

Information Source

Eduardo Apodaca
Vocational Education Productions
California Polytechnic State University
San Luis Obispo, CA 93407
(805) 546 2295

Other Services

Vocational Education Needs Assessment Project

Los Rios Community College District

Director: Louis Johnson

Project No 34-67371-3-8-440 (C) Cost: \$74,650
July 1, 1979 to June 30, 1980

Project Overview

This project was to conduct a statewide needs assessment of a representative sample of about 3,000 Californians and determine their needs and preferences for vocational education programs and services, to develop assessment tools for local districts to use, and to disseminate these tools through a series of publications, workshops, and seminars. Field Research Corporation of San Francisco was contracted to conduct the statewide survey; 3,069 citizens were interviewed by telephone. With technical assistance from project staff, the survey instrument was modified and used by nine community college districts to conduct local needs assessments in 1979-80. Project products included the statewide survey report, *A Survey of California Public Attitudes Toward the California Community Colleges*, a *Needs Assessment Handbook*, and a technical report. The survey report and handbook were sent to all California community college superintendents/presidents, directors of vocational education, state directors of vocational education, and others. The *Needs Assessment Handbook* was named the outstanding research handbook of 1981 by the American Educational Research Association.

Follow-Up Findings

In May 1982, administrators of seven of the local assessments answered inquiries about the process and how the results had been used. Respondents agreed that the study was beneficial and described specific actions they had taken as a result of their findings. These included improving campus security, changing program emphasis, adding and dropping courses, and improving services for special needs groups. The study results had been used as a background for making decisions about "reterenchment" and in accreditation reviews. Several administrators were planning follow-

up assessments to gather more specific information about needs for occupational programs.

Information Source

Jennifer Franz
J. D. Franz Research
2740 Fulton Avenue
Sacramento, CA 95821
(916) 488-8950

Continuation of the California Landscape Placement Project

Butte County Community College District, Butte College

Director: Howard Holman III

Project No. 04-61416-3-8-470 (C) Cost: \$28,080
March 1, 1978 to June 30, 1979

Project Overview

This was the third year of a project to develop a placement system for the landscape industry in California. The development was guided by a consortium of ten representative community colleges and industry. Activities during this funding period included three meetings where participants addressed the updating of curriculum standards and alternative financial support for the project functions; continued refinement of placement procedures; and continued statewide dissemination and data collection regarding job openings, placement information, and curriculum revisions to students, 60 community colleges with ornamental horticulture programs, and the landscape industry via a monthly job list and annual report. An Environmental Horticulture League was organized to continue communication between industry and community college representatives in bi-annual meetings. During the last six months of the project, users were charged a fee, in an attempt to make the service self-supporting; there was a significant drop in use of the service by applicants and employers. The conclusion was that it would be necessary to develop more vocational areas before the service would become self-supporting. Funding for a fourth year was not approved.

Follow-Up Findings

Since attempts to make the placement service self-supporting were not successful, in the fall of 1981 it was taken over by the California Landscape Contractors' Association and is now operated on a fee basis out of their Sacramento office. The close working relationship between the industry and participating colleges has been maintained through annual statewide meetings and individual contacts. Agriculture educators contacted during site visits who offered landscaping programs were familiar with the service; some were in areas where placement was not a problem, but others in areas of less demand were planning to seek accreditation in the program.

Information Source

Howard Holman III
Agriculture Department
Butte College
Route 1, Box 183A
Oroville, CA 95965
(916) 895-2511

SUBJECT INDEX

- Adults (services for), 70, 71, 98
- Administration of justice, 92
- Agriculture education, 77, 82, 90, 102
- Apprenticeship, 64, 72, 73, 89
- Automotive, 67

- Banking/finance, 92
- Basic skills, 72, 73
- Bilingual curriculum, 68
- Business education, 77, 84, 92

- Career guidance systems, 89, 101
- Career planning, 68, 98
- CETA, 87
- Consumer and homemaking education, 78, 83, 94
- Cooperative education, 69, 74
- Counseling techniques, 85
- Counselor educator inservice training, 79
- Curriculum development, 67, 68, 92-95

- Disadvantaged, limited-English speaking, 71, 72, 74, 75, 91, 99
- Displaced homemakers, 62-65
- Dissemination, 102
- Distributive education, 77, 84

- Electronics, 67
- Energy education, 66
- Evaluation, 91
- Evening students (counseling for), 99

- Fashion merchandising, 83
- Fire science, 82, 93

- Gender equity, 70, 71, 80, 95-98
- Guidance and counseling, 68, 69, 70, 71, 81, 85, 89, 98, 99, 101

- Handicapped, 74, 75, 80, 81, 95
- Health careers, 82, 93, 94
- Home economics related occupations, 83, 94
- Home decorating and furnishings occupations, 94

- Individualized inservice training, 86
- Industrial education, 84
- Inservice training, 80-88
- Instructional techniques, 67, 69, 85

- Landscape, 103
- Legal secretarial, 92

- Maintenance technician, 68
- Medical/dental receptionist, 68
- Medical secretarial, 92

- Needs assessment, 65, 103
- New and emerging occupations, 66, 90
- Numerical control machine tool, 74

- Office education, 68, 77, 84

- Parenthood education, 75
- Placement, 67, 69, 72, 103
- Preservice training, 71, 77, 78

- Research, 65, 66, 89-92
- Retention, 61, 91, 97
- Rural vocational education, 92

- Sex equity (see gender equity)

- Teacher educator inservice training, 78, 79

- Vocational education data collection, 96, 99-101

- Wastewater treatment, 95
- Weekend students (counseling for), 99
- Welding, 67
- Word Processing, 75, 92
- Work experience education; 69, 74, 87

AGENCY INDEX

SECONDARY SCHOOL DISTRICTS

Ceres Unified School District

Improved Vocational Guidance Programs for LES/NES, Out-of-School Youth, and the Gifted, 99

Orange Unified School District

Industrial Education Inservice Education, 84

Richmond Unified School District

EUREKA. The California Career Information System, 101

Sacramento City Unified School District

Displaced Homemakers—Project Discover, 63

COUNTY OFFICES

Napa County Superintendent of Schools

Work Experience Education Inservice Education, 87

Orange County Department of Education

Identification of Curriculum for New and Emerging Occupations A Model System, 66

Riverside County Superintendent of Schools

Learning Activity Packages for Health Occupations, 94

San Bernardino County Superintendent of Schools

Adult Career Planning Inventory, 98

California Youth Alternatives Project. San Bernardino Site, 72

San Mateo County Office of Education

HERO (Home Economics Related Occupations) Inservice Education, 83

Home Decorating and Furnishings Occupations Curriculum Guide, 94

Santa Clara County Superintendent of Schools

Cooperative Student Placement Service, 677

Project EXCITE (Curriculum for Maintenance Technicians), 68

Solano County Superintendent of Schools

Health Careers Curriculum Development, 93

Sonoma County Office of Education

Displaced Homemakers—Working Women, 64

Ventura County Superintendent of Schools

A Comparative Study of Computerized Career Information Systems, 89

Development of a California Occupational Information System, 100

COMMUNITY COLLEGE DISTRICTS

Antelope Valley Community College District

Project Open Shop, 67

Butte County Community College District

Continuation of the California Landscape Placement Project, 103

Cabrillo Community College District

Evaluation Study of the Outcomes of Vocational Education Special Projects, 91

Cerritos Community College District

Need Assessment for Occupational Education Home Study Courses and Other Programs, 65

- Chaffey Community College District
 Displaced Homemakers—Homemaker Placement Project, 62
 The Mid-Life Career Redirection Center, 70
 Vocational Education Equity Project (VEEP), 80
 Vocational-Guidance for Handicapped Students. A Training Program, 81
- Contra Costa Community College District
 Curriculum for Training Wastewater and Water Treatment Plant Operators, 95
 A Program to Strengthen Reading and Writing Skills of Vocational Students, 72
- Compton Community College District
 Displaced Homemakers—Career Planning Center, Inc, and Compton College, 65
- Foothill—DeAnza Community College District
 Bay Area Cooperative Education Clearinghouse (BACEC), 69
- Gavilan Joint Community College District
 Cooperative Student Placement Service, 67
- Los Angeles Community College District
 Displaced Homemakers—Community-Based Cooperation to Develop Services for Displaced Homemakers, 65
 Home Economics Inservice Education. Fashion Merchandising, 83
 A Model Project to Reduce Sex Barriers in Vocational Education, 70
 Procedures to Utilize Student Follow-Up Information (SAM) in Course and Program Modification, 101
 Statewide Longitudinal Study of Community College Students, 89
- Los Rios Community College District
 Counseling Materials to Promote Sex Equity in Vocational Education, 98
 Displaced Homemakers—Project Crossroads, 62
 Vocational Education Needs Assessment Project, 103
- Merced Community College District
 Displaced Homemakers—Continuing Education for Women, 62
 Inservice Training for State Professional Staff, 87
- Monterey Peninsula Community College District
 Establishment of Exemplary Energy Related Programs, 66
 Inservice Training for Vocational Education Administrators, 86
 Planning for Renewal in Occupational Programs (PROP), 86
- Mt. San Antonio Community College District
 Dissemination Through Use of Peer Consultants, 86
- Mt. San Jacinto Community College District
 Competency-Based Teacher Preparation for Part-Time Teacher Credentialing, 78
 A Personal Development Guidance Program Using Small Group Learning, 69
- Peralta Community College District
 Career Planning Services for Feeder High Schools, 68
 A Vocational Assessment System and Cooperative Work Experience Model for Disabled Students, 74
- Rancho Santiago Community College District
 Recruitment and Retention of Disadvantaged Students (New Horizons), 71

- Rio Hondo Community College District
 Analysis of Instructional Apprenticeship Services in Public Schools, 89
- Saddleback Community College District
 A Study of Word Processing Competencies With Implications for Training
 Handicapped and Disadvantaged Students, 75
- San Diego Community College District
 Displaced Homemakers—Displaced Homemaker Project, 63
- San Francisco Community College District
 A Model Bilingual Medical/Dental Receptionist Program, 68
- San Jose Community College District
 Early Recognition of Disadvantaged Students (ERDS), 74
 Fire Science Curriculum Development, 93
 Recruitment and Training of Tradeswomen as Occupational Teachers, 71
- San Mateo Community College District
 Electronics Curriculum Development, 67
 Fire Science Curriculum Development, 93
 Technical Language Skills Development in Reading and Writing, 73
- Sierra Joint Community College District
 Consumer and Homemaking Education Inservice Education, 83
 Consumer Education Audiovisual Mini-Units, 94
 Inservice Training for Department/Division Chairpersons and Members of
 Protected Classes in California Community Colleges, 81
 Mini-Units in Parenthood Education, 75
 A Model Vocational Guidance and Counseling Program for Evening and
 Weekend Students, 69
- South County Community College District
 A Machine Tool Technology Program Accessible to the Physically
 Handicapped, 74
- Victor Valley Community College District
 Displaced Homemakers—Homemaker Aide Program, 64
- West Valley Community College District
 Basic Skills Curriculum for Disadvantaged and Limited-English Speaking
 Vocational Education Students, 73
- Yosemite Community College District
 Fire Science Teaching Methodology, 82

UNIVERSITIES

- California Polytechnic State University, San Luis Obispo
 Agriculture Inservice Education, 82
 Agriculture Preservice Education, 77
 Vocational Education Productions: Instructional Materials for Agriculture
 Education, 102
- California State Polytechnic University, Pomona
 Agriculture Preservice Education, 77
- California State University, Chico
 Agriculture Preservice Education, 77
- California State University, Fresno
 Agriculture Preservice Education, 77

- California State University, Fullerton
 Vocational Education Equity Project (VEEP), 80
- California State University, Long Beach
 Industrial Education Inservice Education, 84
- California State University, Los Angeles
 Competency-Based Preservice Teacher Education Program for Office and
 Distributive Education, 77
 Industrial Education Teacher Educator Inservice Training, 78
- California State University, Sacramento
 Coordination of Common Personnel Training Activities, 88
 Health Occupations Inservice Education, 82
 Office and Distributive Education Inservice Education, 84
- San Diego State University Foundation
 Training for Home Economics Teacher Educators in the Use of the
 MATCHE Curriculum, 79
- San Jose State University
 Handbook for Developing Competency-Based Curricula for New and
 Emerging Occupations, 90
 Pupil Personnel Trainer Update, 79
- University of California, Davis
 Agriculture Preservice Education, 77
 California Youth Alternatives Project Evaluation, 91
 Emerging Occupations in Agriculture: Impact Upon Curriculum and
 People, 90
- University of California Extension
 A Statewide Vocational Education Teacher Credentialing Program, 78
- University of California, Los Angeles
 Career Counseling Task Forces, 85
 Statewide Inservice Training for Persons Having Responsibility for
 Vocational Education for the Handicapped (FIVE H), 80
- University of San Francisco
 A Study of Recruitment and Retention of Disadvantaged Students in
 Community College Technical Programs, 91

OTHER PUBLIC AGENCIES

- Chancellor's Office, California Community Colleges
 Data for the Allocation Formula and Vocational Education Reports, 99
- Chancellor's Office, California Community Colleges and the State Department
 of Education
 California Statewide Dissemination System for Vocational Education
 (VOICE), 102
- North Orange County Regional Occupational Program
 Media and Curriculum Development for the Handicapped, 95
- State Department of Education
 Implementation of a Statewide Personal and Career Development Plan for
 Vocational Education, 101

PRIVATE FIRMS AND AGENCIES

CARVELL Education Management Planning, Inc.

Research to Identify, Analyze, and Disseminate Information About
Opportunities for Males and Females in Nontraditional Occupations, 97

Strategies to Recruit and Retain Students for Nontraditional Programs and
to Assure Program Completion and Placement, 97

Equal Rights Advocates, Inc.

Materials for Community Groups on Sex Bias in Vocational Education, 98

Materials for Training Vocational Education Administrators in the
Elimination of Sex Bias, 97

Evaluation and Training Institute

A Program to Improve Instructional Effectiveness in Vocational
Education, 85

Ira Nelken and Associates, Inc.

Business Education Program Guide: Word Processing, Legal Secretarial,
Medical Secretarial, and Banking/Finance Supplements, 92

A Study of Vocational Enrollments in Terms of Sex and Racial Balance, 96

Minority Affairs Institute, Inc.

Resource Bank for Overcoming Sex Bias and Stereotyping in Vocational
Education, 96

Vocational Guidance Resource Handbook, 99

923 Group

Administration of Justice Curriculum Update, 92

Planning Associates

CETA Workshops: Orientation for Local Administrators and Inservice
Training in Job Development, 87

Strategies for Improving Rural Vocational Education, 92

Steiger, Fink, & Koscoff, Inc.

Fostering Sex Fairness in Vocational Education, 95

Appendix B INDIVIDUALS WHO PROVIDED INFORMATION

Harold Abbott	Pasadena City College	Adrian Cohn	College of San Mateo
Keith Adams	Cerritos College	Susan Coleman	Orange Coast College
Cynthia Allen	Victor Valley College	Dean Colli	Columbia College
David Allen	University of California Extension	Nancy Collins	Los Medanos College
Vicky Allison	Los Medanos College	Irvin Colt	Consultant
Chuck Alvarez	Pierce College	Mary Conway	State Department of Education
Gary Anderson	Santa Rosa Junior College	Gwen Cooke	San Diego State University
Bill Anderson	State Department of Education	Phyllis Cooper	San Diego Community College District
Eduardo Apodaca	Vocational Education Productions	Susan Cotler	Long Beach City College
Charles Ardolino	Coastline College	Ken Cox	Evergreen Valley College
Joyce Arntson	Saddleback College	Walter Cox	Pacific Union College
Ray Bachtellé	Mi Wuk Village	Rex Craig	Contra Costa College
Loretta Bailes	Compton College	Jim Crandall	State Department of Education
Judy Bank	Los Medanos College	Doug Cronin	Chancellor's Office
Lucille Barcroft	Contra Costa College	John Dell	Oxnard College
Cherie Barker	Palomar College	Willard Dellegar	Grossmont College
Mario Barrios	Mission Community College Center	JoAnn Denbow	Cherrywood Elementary School
Kathy Basil	Pierce College	Eileen Dickson	Sierra College
Charles Beall	California State University, Los Angeles	Flora Dillon	North Orange County ROP
Claire Biancalana	Cabrillo College	Christina Disalvo	Southwestern College
Dick Bidleman	Vista College	Ann Dragavon	EUREKA
Arlene Bireline	Merced College	Joann Driggers	Mt. San Antonio College
Bob Blanchard	Santa Rosa Junior College	Harold Dromenck	Gavilan College
Glen Blomgren	California State University, Fresno	Claudia Duffey	San Jose State University
Bill Boakes	Chancellor's Office	Lenore Eisenstein	Harbor College
David Bockman	College of the Siskiyous	Tone Elioff	Vista College
Roland Boldt	State Department of Education	Felix Elizalde	Vista College
Diane Bowers	Monterey Peninsula College	Mel Elkins	Santa Barbara College
Betty Boyce	Allan Hancock College	Dan Estrada	Chancellor's Office
Sandra Booher	Los Medanos College	Virginia Estrada	Gavilan College
Nathan Boortz	Consultant	Joe Farhat	North Orange County ROP
Bill Branson	Los Medanos College	Freda Fisher	Ventura College
Everett Brewer	Saddleback College	Naomi Fitch	San Joaquin Delta College
Roger Briscoe	Antelope Valley College	Jack Fleming	Moorpark College
Walter Brooks	Consultant	Forrest Folck	Educational Cultural Complex
Robert Brown	Chabot College	Carol Flowers	Coastline College
Roger Brown	Pierce College	John Flynn	Oxnard College
Pam Brunton	Cerritos College	Bertha Foster	Contra Costa College
Edward Buckles	Porterville College	Jennifer Franz	J. D. Franz Research
Frank Budd	Riverside City College	Flint Freeman	California State Polytechnic Univ., Pomona
Don Busche	Saddleback College	Gerald Fries	Fresno City College
Benton Caldwell	Mt. San Jacinto College	Larry Gay	Cal. Poly. State University, San Luis Obispo
Chuck Capsel	Antelope Valley College	Connie Gipson	State Department of Education
Jim Cardwell	Monterey Peninsula College	Phyllis Goldman	Contra Costa College
Susan Carleo	Los Angeles Valley College	Lyman Goldsmith	San Marino
Fred Carvell	CARVELL Education Management Planning	June Goodman	San Diego Community College District
Joan Carvell	CARVELL Education Management Planning	Pete Goodson	Contra Costa College
Marshall Chatwin	Monterey Peninsula College	Gary Graham	Gavilan College
Stanley Chin	Los Medanos College	Donald Greene	Taft College
Robert Ciauri	San Bernardino County ROP	Chester Gromacki	North Orange County Com. Col. Dist.
Jean Clawson	Chancellor's Office	Henry Gronroos	Santa Rosa Junior College
Darrell Clemmensen	California State Univ., Los Angeles	Al Guevaru	Foothill DeAnza Community College District
Sue Cobble	San Francisco Community College District	Sandy Gum	College of San Mateo

Keith Gummere . . . California State University, Los Angeles
 David Guzman Santa Ana College
 Thorne Hacker Monterey Peninsula College
 George Hall Chancellor's Office
 Dennis Hampton California State University, Chico
 David Hans Vista College
 Eloise Hansen DeAnza College
 Sarah Harbor Pierce College
 Frances Harkins California State University, Fresno
 Jean Hazen College of the Redwoods
 Charles Healy University of California, Los Angeles
 Russ Henson North Orange County ROP
 Robert Hinchberger Cerritos College
 Jim Hirschinger Chancellor's Office
 John Holleman Vista College
 Melvin Holm Sierra College
 Pete Holman Butte College
 Al Holmes State Department of Education
 Martha Hood Palomar College
 Loma Hopkins Chaffey College
 Betsy Horning Los Angeles Valley College
 Eleanor Hoskins Career Planning Center, Inc.
 Suzi Howard State Department of Education
 Pat Hill Hubbard American Electronics Association
 Bob Hughlett Cerritos College
 Robert Hunter Chabot College
 Russ Hunter Pierce College
 Mildred Ikemoto Cerritos College
 Sally Ingmanson Grossmont College
 Jo Anna Ito Sacramento City Unified School District
 Kenneth Jackson Contra Costa College
 Patricia Jacobsen San Bernardino Valley College
 Margaret Jensen Victor Valley Counseling Center
 Milo Johnson Rio Hondo College
 Sharon Johnson Los Medanos College
 Thayer Johnson Los Medanos College
 Walter Karcich Gavilan College
 Dianne Kazahaya East Los Angeles College
 Mary Kelso-Clene Antelope Valley College
 Yungho Kim Educational Evaluation and Research, Inc.
 Edith Klenhard Yuba College
 Alexa Knight North Orange County ROP
 David Knight Monterey Peninsula College
 Maureen Knightly Vista College
 Allan Kumlin Victor Valley College
 Frederick Lamm Compton College
 Lyn Lamont EUREKA
 William Lane Allan Hancock College
 Marjorie Lasky Contra Costa College
 Irvin Lathrup California State University, Long Beach
 Jerry Laureyns EUREKA
 Ugo Lea Modesto Junior College
 Rosemary Leach Skyline College
 James Leising University of California, Davis
 Shirley Lewerenz Cypress College

Marty Licero Crafton Hills College
 Peter Lock Contra Costa College
 David Longobardi Antelope Valley College
 Carol Lopez Chancellor's Office
 Bud Lorbeer Rio Hondo College
 Don Love Pierce College
 Kathy Lusk Santa Ana College
 Wilmer Maedke California State University, Los Angeles
 Owen Marron Human Resources Development Institute
 Marilyn Maze EUREKA
 Don Matthews Oxnard College
 Ralph Matthews Chancellor's Office
 Les McCabe Merced College
 Janet McCormick Los Medanos College
 Ross McDonald Los Medanos College
 Andrew McFarlin Evergreen Valley College
 Shirley McGillicuddy Shirley McGillicuddy & Assoc.
 Jason McLoney Humboldt State University
 Edith McTiernan Orange Coast College
 Roy Meade Orange Unified Schol District
 Jim Meidl State Fire Academy
 Gary Miller Gavilan College
 John Mills Chancellor's Office
 Michael Mills Vista College
 Patricia Mohr Chaffey College
 Arturo Moreno Santa Ana College
 Denise Morgan Citrus College
 Bill Morris Chancellor's Office
 Bob Munsey Pierce College
 Allene Murdoch Chancellor's Office
 Milton Myers Chaffey College
 Ken Nakano East Los Angeles College
 Phil Nash Monterey Peninsula College
 Ernest Neasham State Department of Education
 Anna Nelson College of the Redwoods
 Helen Nespor State Department of Education
 Bettye Nippert Sierra College
 Bernie Norton State Department of Education
 Fred Obermiller College of the Siskiyous
 Claire O'Brien State Department of Education
 Greg Ohannesson San Jose City College
 Cliff Oliver Chabot College
 Earl Orum Yuba College
 M. L. Oxford North Orange County ROP
 Jeanne Palmie Modesto Junior College
 Georgellen Parker Fresno City College
 David Passarell Chancellor's Office
 Robert Peacock Gavilan College
 Edwin Pearce Cuesta College
 Gladys Penner Mission College
 Paulette Perfumo Chancellor's Office
 Barbara Peterson California State University, Fullerton
 Charles Peterson Victor Valley College
 Marijean Piorkowski Cerritos College
 Carlota del Portilla Mission Community College Center

Lila Powers	Cerritos College	Rosetta Smith	Monterey Peninsula College
George Pratte	Santa Clara County ROP, South	Dick Snibbe	Monterey Peninsula College
Leonard Price	Los Medanos College	Jack Snyder	Consultant
Dana Prichard	College of Marin	Frank Soldo	North Orange County ROP
Barbara Priddy	Orange Coast College	Eugene Stevens	Allan Hancock College
Charles Purcell	American River College	Pat Stanley	University of California, Davis
John Quier	Harbor College	Elizabeth Stark	Chaffey College
Bonnie Rader	California State University, Long Beach	Bill Steinberg	Consultant
Joe Randolph	Antelope Valley College	Bruce Stewart	Mira Costa College
Larry Rathbun	Cal. Poly. State University, San Luis Obispo	Barbara Sullivan	Chancellor's Office
George Redden	John O'Connell Center	Sandra Sweitzer	Working Women, Inc.
Janette Reints	Grossmont College	Ted Sypolt	Allan Hancock College
Adrienne Renner	Cabrillo College	Bob Sysom	Los Medanos College
Laurel Richter	College of the Redwoods	Frances Tacionis	California State University, Chico
Joy Risser	Victor Valley College	Robert Tholl	Ventura College
John Rivers	Monterey Peninsula College	Gary Thompson	State Department of Education
Frank Roberts	Antelope Valley College	Orville Thompson	University of California, Davis
Donna Roll	San Diego Community College District	Ruby Trow	California State Polytechnic Univ., Pomona
Carol Rookstool	Fashion Inst. of Design and Merchandising	Anne Upton	State Department of Education
Stephanie Roscoe	Los Medanos College	William Van Burgess	University of San Francisco
Candy Rose	Mission College	Diane Van Hook	Santa Ana College
Clare Rose	Evaluation and Training Institute	Glenn Van Noy	Consultant
Jack Rudd	Ceres Unified School District	Glen Vaughan	Computer Post of San Diego
Pat Rusk	Vista College	Nona Verloo	State Department of Education
James Ryan	California State University, Long Beach	Carl Waddle	Fresno City College
Buster Sano	Chancellor's Office	Kay Walding	Gavilan College
Nancy Satamoto-Sayers	Educational Cultural Complex	Mary Lou Waldrop	Chaffey College
David Sawyer	Monterey Peninsula College	Dan Walker	Foothill College
John Schaub	Cuesta College	Jim Warman	American River College
Bob Schaeffer	Stillwater Associates, Inc.	Lorin Warner	Rio Hondo College
Herbert Schlackman	Santa Monica College	Ruth Waxman	Albany High School
Jeanine Schoemer	Chancellor's Office	Earl Webb	Evergreen Valley College
Joann Schoen	Monterey Peninsula College	Mary Lou Lohman Weidman	Cerritos College
Aaron Schrier	Los Angeles Mission College	Neal Weisenberger	Antelope Valley College
Loran Schuck	Antelope Valley College	Henry Weiss	Industry Education Council of California
Carol Schuetz	Merritt College	Norval Wellsfry	Sacramento City College
Eugene Schumacher	College of the Siskiyous	Cay Welsh	State Department of Education
Judith Schwartz	Santa Monica College	Lynn Whitmore	Vista College
Bill Shaw	Pierce College	Candace Williamson	Columbia College
Mary Shaw	Fullerton College	Linn Williamson	American River College, Placerville
Eileen Sheff	Pierce College	Janice Willis	College of San Mateo
Stephen Sheldon	Pierce College	Lillian Winters	Modesto Junior College
Win Silva	Chancellor's Office	Don Woodburne	Pierce College
Barbara Simmons	Barstow College	Jim Wolfsberger	Gavilan College
Waldo Simpson	Contra Costa College	Marilyn Worley	Allan Hancock College
Chris Skidmore	John O'Connell Center	Cal Wright	Educational Evaluation and Research, Inc.
Don Sly	Antelope Valley College	Brian Yarnell	North Orange County ROP
Art Smith	San Bernardino County ROP	Rae Yoshida	Antelope Valley College
Carol Lee Smith	Shasta College	Kathy Young	Moorpark College
Eddie Smith	Chaffey College	Kathy Zanger	Gavilan College
Harry Smith	San Bernardino Valley College		