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ABSTRACT

An evaluation was made of the occupational education program at California community colleges. Three areas were studied: strengths, improvement needs, and research priorities. Evaluations, combining college self-appraisals with validations of the self-appraisals by visiting COPES teams, were conducted over a three-month period. Team ratings covered 60 items. Findings indicate: (1) Strengths include qualifications of occupational education instructional staff, experience of this staff, qualification of occupational education coordinators, quality of instruction, and salary schedules; (2) Needs include improved college organization, increased administration commitment to occupational education, and provision of educational opportunities consistent with community needs; and (3) Research priorities include data collection, use of job success and failure information of occupational education graduates in program planning, and use of individualized instruction. A four-page COPES status report on occupational education in representative colleges outlines in detail the major strengths, critical needs and research priorities in this field (Author/CK)

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COPEs



COMMUNITY COLLEGE
OCCUPATIONAL PROGRAMS
EVALUATION SYSTEM

REPORT

Occupational Education In Representative California Community Colleges...

- Major Strengths
- Critical Needs
for Improvement
- Research Priorities

May, 1973

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Palo Alto, California

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"The outcomes or products of this project will be a list of weaknesses or areas of occupational education that need improvement. The list will be ranked in order of priority in terms of critical importance to occupational education. This information will be useful to the Chancellor's Office and others in the selection and funding of future research projects."

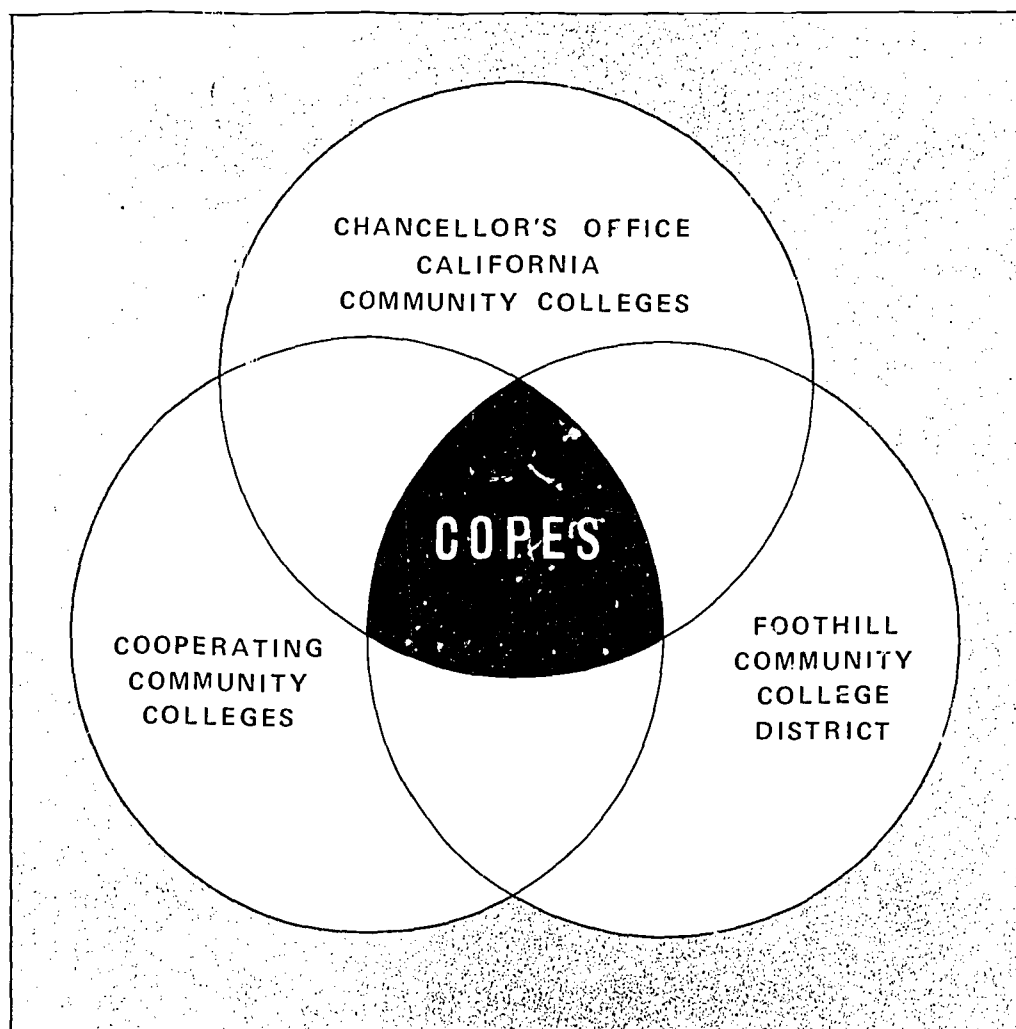
---COPES VEA Part C Proposal

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INFORMATION

COPES COOPERATIVE LEADERSHIP MODEL FOR IMPROVING OCCUPATIONAL EDUCATION



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Section 1

INTRODUCTION

INTRODUCTION

COPES (Community College Occupational Programs Evaluation System) was created in 1971 by the Chancellor's Office of the California Community Colleges with the support and participation of local community college leaders in the state. Its goal: to improve the quality and availability of occupational education in California's community colleges.

In the first year, the main thrust was directed to what was going into the system, in terms of refinements made in the light of field-testing at 13 cooperating colleges. For the second project year, 1972-73, however, a second important general thrust was added, along with continued refinement.

This second thrust dealt with what was coming out of the system, what was being learned through its application about the status of occupational education in California community colleges. The stated objective was:

"To assess the major strengths and needs for improvement in occupational education programs in a 10 percent stratified random sample of California community colleges. The assessment will be made during the next 12 months utilizing the California Community College Occupational Programs Evaluation System and the trained observers produced by the COPES project."

The year's activities were planned to yield a list of improvement needs, rank-ordered for priority in terms of critical importance to occupational education. Priorities would be established also for future research dealing with the critical needs.

Early in the year, a representative sample was drawn by the Chancellor's Office. Colleges that had already been the sites of COPES field-tests were excluded, as well as newly established colleges. As a

result, a total of eight colleges was required for the 10 percent assessment. Those selected were equally divided on a geographical basis (four in Northern California, four in Southern California) and on the basis of size in terms of occupational education enrollments (two each in the "small," "medium small," "medium large" and "large" categories). Size was defined as ADA (average daily attendance) in occupational education the previous year. In the eight defined groups, colleges were selected through use of a table of random numbers.

Evaluations, combining college self-appraisals with validations of the self-appraisals by visiting COPES teams made up of California community college professionals and knowledgeable lay persons, were conducted during the first three months of 1973.

At the conclusion of this process, the team ratings of the eight colleges on the 60 evaluation items in the system were tabulated and rank-ordered on the basis of their mean ratings. Major occupational education strengths were determined from this list.

The 11 professional leaders who had been site visit team chairmen during 1972-73 were asked to serve as the COPES panel of competent judges. Utilizing the above list, they identified and rank-ordered 10 items which, in their judgment, if improved, would have the greatest impact upon improving the quality and availability of occupational education in California community colleges. Tabulations of the judgments of the members of this panel provided the determination of critical improvement needs.

Finally, the team chairmen's judgments were presented to more than 40 professionals attending a California Junior College Association state research conference. They were asked to select the five items which in their judgment would lend themselves most effectively to research and development. Tabulations of their responses provided the determination of research priorities.

Other evidence of research priorities had been collected during the site visits to the eight representative colleges. In the debriefing at the conclusion of a site visit, each team member was asked to list in order the important research and development priorities on the basis of that site visit. These judgments were tabulated and are discussed in Section 5.

Grateful acknowledgment is made to all who participated in this undertaking. The eight cooperating colleges are identified in Appendix A. Names and affiliations of site visit team participants and additional team chairmen who served on the judging panel are shown as Appendix B; names and affiliations of research conference participants, as Appendix C.

This report is organized to deal first in summary form and second, where warranted, in expanded form, with information relating to the findings.

Section 2

SUMMARY OF FINDINGS

SUMMARY OF FINDINGS

As comprehensive educational institutions, California community colleges recognize, and conscientiously discharge, their responsibility for occupational training, retraining and upgrading.

They also recognize, as does the Chancellor's Office, that continuing evaluation of the quality and availability of their occupational programs and services is vital for sound planning and wise allocation of resources.

Although the COPES assessment was limited to eight colleges, the fact that those eight were selected as a representative sample of all California community colleges indicates that the findings which follow have implications for all.

MAJOR STRENGTHS

The chief strengths of occupational education at community colleges in California lie with the professionals most directly involved in occupational education and the way they are doing their jobs. The four top-ranked items all speak to that fact.

In rank order, the 10 highest overall strength ratings by the teams were accorded to:

- Qualifications of occupational education instructional staff.

- Occupational experience of occupational education instructors.
- Qualifications of occupational education coordinator(s) and/or director(s).
- Quality of occupational instruction, in general.
- Salary schedule provisions for occupational education professionals in relation to other professional staff.
- Number of instructors necessary for occupational program effectiveness.
- Utilization of occupational education instructional facilities and equipment.
- Updating of occupational education instructional content and method.
- Use of community resources in class instruction (e.g., field trips, outside speakers, borrowed equipment).
- Adequacy and availability of occupational education instructional equipment.
 --rated equally with the next item--
- Adequacy and availability of occupational education instructional materials.

CRITICAL NEEDS FOR IMPROVEMENT

Critical needs for improvement are not necessarily lowest ranked items. Judgment on the importance of an item in improving the quality and availability of occupational education must enter into the establishment of priority needs. Thus, in any situation, an area discerned to be of only moderate weakness (or even moderate strength)

but of great overall significance could deserve a higher improvement priority than an area of much more substantial weakness but lesser or more limited significance.

This distinction was made in the COPES assessment process. The 11 site visit chairmen for 1972-73 evaluations formed the panel of competent judges to determine priorities of critical needs for improvement. They utilized the team "strength-weakness" ratings in their deliberations. After assessing items for potential beneficial impact on the quality and availability of occupational education at California community colleges, they made their determinations of priority needs. These needs have only limited correlation with the items at the "weakest" end of the teams' rating scale. (These differences are further discussed in Section 4 of this report; the panel's rankings are presented in Appendix D, Table D-1.)

In rank order, the 10 highest overall "critical needs for improvement" ratings by the panel of judges were:

- College organization for effective coordination and direction of occupational education.
- College administration's commitment to occupational education.
- Articulation with other educational organizations in the college area (e.g., high schools, other community colleges, regional occupational centers) in providing for community occupational needs.
- Provision of educational opportunities consistent with community needs (e.g., population needs, labor market needs) for training, retraining and upgrading personnel.
 --rated equally with the next item--
- Systematic follow-up of students who have completed occupational programs.

- Provision for vocational work experience in occupational education programs.
- Emphasis upon occupational education counseling and guidance to high school students.
- Status of occupational education dean or director on the college "administration team."
- Use of job success and failure information of occupational education graduates in program evaluation and planning.
- Systematic collection and translation of information on community occupational education needs (population needs, labor market needs and opportunities).

RESEARCH PRIORITIES

In the COPES assessment, research priority rankings differed from critical needs for improvement. The reason: Highest ranking critical needs do not necessarily lend themselves to research.

The more than 40 attendees at the California Junior College Association (CJCA) conference for research professionals who participated in the final phase of the COPES assessment process were asked to consider the data from still another point of view. They were requested, utilizing the team chairmen's judgment tabulations, to select the five critical needs items which would lend themselves most effectively to research and development. The researchers' determinations are presented in Appendix D, Table D-2.

In rank order, their five highest overall "research priority" ratings were:

- Systematic collection and translation of information on community occupational education needs.
- Provision of educational opportunities consistent with community needs for training, retraining and upgrading personnel.

--rated equally with the next item--

- Systematic follow-up of students who have completed occupational programs.
- Use of job success and failure information of occupational education graduates in program evaluation and planning.
- Use of individualized instruction (e.g., programmed learning, self-paced instruction, tutoring).
(Note: This item had been rated among the top 15 by the judges' panel, but not among the top 10.)

It might be observed that the researchers' two highest combined ratings fall into one "package area" (obtaining information on community needs and providing educational opportunities consistent with those needs) and that the two next highest combined ratings are in another "package area" (obtaining student follow-up information and using it in program evaluation and planning).

OTHER FINDINGS OF INTEREST

1. Variations in site visit team ratings among the four "enrollment size" categories. No substantial variations resulted. While ratings on certain items, such as "provision for coordination and/or direction," tended to rise somewhat in direct relation to enrollment size, the smaller colleges rated higher on other items, such as "adequacy of instructional facilities."

2. Variations in ratings and rankings among respondent groups.

College respondents tended to rate their institutions higher than the teams did, possibly because the latter had a better understanding of criteria. (For complete profile ratings of four respondent groups, see Appendix E.) Also on the rankings of items there were variations among groups, as discussed in Section 6. Team rankings were substantially higher than the combined college rankings on some items (notably adequacy of facilities and contributions of funds and equipment). The combined college rankings were substantially higher than team rankings on other items (notably status of the occupational dean or director and use of advisory committees).

3. Student and advisory committee member perceptions. Students generally rated quality of their occupational instruction highest, college effectiveness in job placement of graduates lowest. Advisory committee members generally gave top ranking to the overall reputation of the college in the community and lowest ranking to systematic follow-up of occupational graduates.

4. "Don't know" responses. Roughly one-half of all college professional respondents were unaware of what the scope of staff participation had been in development of one-year and five-year district vocational education plans submitted to the state or whether their occupational programs were in concurrence with the annual plan. More than half of the student respondents had no knowledge of the effectiveness of job placement of graduates or of the graduates' subsequent job success. More than half of the advisory committee respondents were equally unacquainted with college follow-up efforts regarding occupational graduates.

5. Variations in team ratings between the eight representative colleges and 10 other colleges which cooperated in further system refinement field-testing during the year. Generally, the correlation was quite high. The four leading strengths rated at the sample colleges were identical to those at the other 10 colleges, although their order varied slightly. The three items accorded lowest ratings were identical in both groups, although again their order varied slightly.

Section 3

MAJOR STRENGTHS

MAJOR STRENGTHS

Written COPES reports submitted to each of the eight representative colleges in the assessment activity bore out, in the detail of prose, what had been presented in numerical form on the site visit teams' rating sheets.

These written reports, summarizing team oral presentations to college personnel, provide many testimonials to the quality of the occupational programs, and the high caliber and dedication of the professionals charged with carrying out the programs.

A few examples are cited below:

"The quality of occupational instruction is notable and much to the credit of qualified and dedicated staff. Students in the main feel that the occupational instruction they are receiving will result in job placement; this is apparent to the observer, too."

"The enthusiasm of the occupational instruction staff is extremely high and worthy of commendation. This enthusiasm spills over into many other instruction-related functions as a big 'plus' for _____ College."

"...the quality and sincere dedication of the occupational faculty. Well-qualified, energetic, proud of their work, these teachers exhibit much willingness to 'walk the extra mile' on behalf of their students."

"...the comprehensive evening offerings in occupational education and their close articulation with those in the day programs. ...the praiseworthy response to student needs for short-range employment skills evidenced in new certificate programs..."

"The college possesses a truly outstanding and competent faculty dedicated to maintaining excellence in the quality of instruction. The administrative

commitment toward employing experienced and qualified faculty, and in providing an equitable and top-notch salary schedule, is highly commendable."

"Despite pressing budgetary capital outlay problems, the administration and occupational staff have shown a commitment to obtain maximum utilization of existing physical facilities and equipment."

"...utilization of community resources in classroom instruction. Field trips, outside speakers and borrowed equipment are fully employed in improving the quality of classroom, laboratory and shop experience."

"COPEs team members concurred that the college has a very energetic occupational education staff, ready and willing to develop innovative programs that will enhance educational opportunities for the students."

"...the tireless and inspirational discharge of administration coordinative responsibilities.
...the occupational emphasis exhibited both in evening college and community service offerings."

"...individual occupational faculty and occupational departments are making concerted efforts to update instructional course content and methods. This is primarily accomplished by maintaining continuing contact with former students and with current and prospective student employers. Further enrichment is accomplished by inviting business and industrial representatives to speak to classes."

"College occupational staff are achieving maximum utilization of instructional facilities and equipment, and have directed energies toward obtaining necessary additional equipment through existing federal programs, projects and community resources."

"Occupational experience of most instructional staff appears to be current and relevant to the occupational offerings. Such competence inspires a feeling of respect and confidence among the occupational instructional team and students."

On the basis of all the evidence, it can be safely stated that occupational education in California community colleges is in good hands. Where needs for improvement exist, they largely have to do with the tools those hands require for maximum accomplishment.

Section 4

CRITICAL NEEDS FOR IMPROVEMENT

CRITICAL NEEDS FOR IMPROVEMENT

COMPARISON WITH TEAM "CRITICAL NEED" CONCLUSIONS

As noted and explained in Section 2, the improvement priorities determined by COPES' panel of judges (the 11 professional leaders who served as site visit team chairmen during 1972-73) have only limited correlation with the evaluation items rated lowest by the teams on the summary profile forms for the eight representative colleges. (See Table 1.)

Yet there is a distinct relationship between the judges' determinations and the critical needs for improvement perceived by the teams and presented to college personnel in COPES' oral and written reports. This is because "weighting" of the items for overall significance, while not involved in the summary profile ratings, was in each case heavily involved in assuring appropriate perspective and assistance in the team reports.

Team statements in the "critical needs" and "summary" sections of the written reports to the eight colleges are cited below, as they apply to the judging panel's rank-order list of improvement priorities:

Organization for Effective Coordination and Direction of Occupational Education

(Critical improvement need cited at seven colleges)

"There does not seem to be a positive identifiable delegation of responsibilities, authorities and accountabilities for occupational education at _____ College. Clarification and, where needed, redefinition could have greatly beneficial impact on the instructional staff's confidence in administrative personnel and significantly improve the levels of participation and involvement in decisions that are vital to occupational education."

Table 1
COMPARISON OF COPEs ITEMS
RANKINGS BY TWO GROUPS

Improvement Priority Rankings by 11 Competent Judges		Composite Lowest Ratings by Site Visit Teams by 8 Representative Colleges	
Rank	Item	Rank	Item
1	3.2 Organization for effective coordination and direction of occupational education	60	3.12 Systematic follow-up of students who have completed occupational programs
2	3.1 Administration's commitment to occupational education	59	3.13 Systematic follow-up of students who have dropped out of occupational programs
3	2.5 Articulation with other educational organizations in your area (e.g., high schools, other community colleges, regional occupational centers) in providing for community occupational needs	58	3.9 College-wide coordination of placement services with occupational education curriculums
4.5	2.3 Provision of educational opportunities consistent with community needs (e.g., population needs, labor market needs) for training, retraining, and upgrading personnel	56.5	3.2 Organization for effective coordination and direction of occupational education
4.5	3.12 Systematic follow-up of students who have completed occupational programs	56.5	3.17 Participation in development of one-year and five-year district vocational education plan submitted to state
6	2.7 Provision for vocational work experience in occupational education programs	54.5	3.7 Emphasis upon occupational education counseling and guidance: To adult and evening students
7	3.8 Emphasis upon occupational education counseling and guidance to high school students	54.5	3.18 Systematic collection and translation of information on community occupational education needs (population needs, labor market needs and opportunities)
8	3.3 Status of occupational education dean or director position on the college "administration team"	51.5	1.2 Development of measurable learner performance objectives in organizing occupational programs
9	3.15 Use of job success and failure information of occupational education graduates in program evaluation and planning	51.5	1.5 Planned enrollments in relation to community needs (e.g., population needs, labor market needs)
10	3.18 Systematic collection and translation of information on community occupational education needs (population needs, labor market needs and opportunities)	51.5	3.4 Awareness of college's occupational education goals by all faculty and staff
		51.5	4.15 Use of advisory committees

"There are inconsistencies in the administrative organizational structure as it relates to occupational education...Serious consideration might be given to re-examining the total administrative structure in order to provide for a more functional system."

"Occupational education at _____ College has grown tremendously. Yet there has been little corresponding increase in the allocation of administrative time specifically associated with the coordination of occupational education. In the interest of management effectiveness, the disparity between these two factors should be carefully weighed."

"Consideration should be given to the provision of administrative time for occupational education management on a basis more commensurate with responsibility. It appears that at present the vocational education coordinator is so seriously overloaded that he cannot begin to achieve immediate and long-range goals."

"The present organizational plan merits further examination, since it does not allow for maximum responsiveness to occupational needs. Job responsibilities are not clearly defined, lines of authority are unclear and there is little provision for periodic review in detail by all levels of occupational staff. The college might consider a plan incorporating more complete integration of occupational education under unified leadership and supported by a more functional division structure."

"There are far too many blurrings and ambiguities in the present, somewhat 'jury-rigged' pattern of organization, ranging from the high titular status of the dean and the operational realities of his position through the roles of the assistant dean and coordinator to the advisability and workability of part-time other administrative functions."

"There is a need for more specific coordination and direction of the total occupational program. The college is too dependent upon individual effort and initiative. Although the sum total of these efforts is notable, a more systematic approach is needed in the future."

Administration's Commitment to Occupational Education

(Critical improvement need cited at two colleges)

"While the published district plan and the catalog statements give evidence of clear commitment and direction, commitment

and direction are anything but clear to the majority of the staff who are involved with occupational education."

"Perhaps the most attenuating factor in occupational education that faces the college is the impression in the minds of many personnel that there is a broad gap between verbalized administrative commitment and supporting action."

Articulation with Other Educational Organizations in Area

(Critical improvement need cited at two colleges)

"It is significant that whereas continuing and satisfactory lines of communication are open between _____ College and such other area institutions as high schools and four-year colleges, communication and resultant coordination of occupational education activities among the colleges of _____ District were termed infrequent and unsatisfactory by _____ College personnel in interviews with the COPES team. Certainly no communication channel, no coordination could be more important than this, for any of the district colleges."

"There is a serious need for better coordination between the college and local high schools..."

Provision of Educational Opportunities Consistent with Community Needs

(Critical improvement need cited at four colleges)

"Now, with changes in the economy of the area served..., the college must...develop a new 'road map' for the future that is consistent with community needs and maximizes student opportunities."

"The current approach to planning in occupational program areas generally is not goal-oriented, involves a casual process and makes little use of factual data..."

"It appears that insufficient attention is being devoted to district planning for vocational education. The current plan document does not envision any new programs for the next five years..."

"In terms of occupational education service to, and reputation in, the community, _____ College may well be at a critical point in its history. The continued high stature of the

institution in both regards will be dependent upon its continued ability to meet community needs. That ability is now being heavily tested..."

Systematic Follow-up of Students
Who Have Completed Occupational Programs

(Critical improvement need cited at two colleges)

"A systems approach to collecting, analyzing and disseminating follow-up data on students would contribute immeasurably to the effectiveness of occupational education programs and increase planning accuracy."

"Systematic institutional procedures should be developed and implemented for follow-up."

Provision for Vocational Work Experience
in Occupational Education Programs

(Critical improvement need cited at one college)

"While coordination and systematization have newly been applied to vocational work experience, the present status of the program is embryonic in comparison with its full potential, in terms of number of students served. There is a pressing need to evaluate present priorities to determine the feasibility of bolstering staff assigned in this area to permit expansion of work experience opportunities."

Emphasis on Occupational Education Counseling
and Guidance to High School Students

(Critical improvement need cited at one college)

"Counseling emphasis on students soon to emerge from feeder high schools merits re-examination."

Status of Occupational Education Dean or Director
Position on the College "Administration Team"

(Critical improvement need cited at two colleges)

"The dean of vocational-technical education, although given titular status, functions in a staff rather than a line capacity, in contrast to other key management personnel. It is apparent that some of the crucial occupational management functions have been assigned to other administrative personnel."

"Consideration should be given to the question of whether the rank of the administrator chiefly responsible for occupational education is commensurate with the level of delegated authority and duty."

Use of Job Success and Failure Information
of Graduates in Program Evaluating and Planning

(Critical improvement need cited at one college)

"The use of job success and failure information of occupational education graduates could be invaluable in program planning and evaluation."

Systematic Collection and Translation
of Information on Community Needs

(Critical improvement need cited at three colleges)

"More effective planning is needed prior to implementing new occupational programs and courses. Systematic labor, community and job market analyses, including assessments of required skills and opportunities available, are vitally needed to insure program success."

"Inputs from advisory committees and other specialized sources are valuable aids in program planning and review. However, continuing comprehensive assessments of labor market needs are also essential, not only to verify the specialized inputs but to identify new employment fields that may lie outside the areas of concentration of any of the presently utilized sources of information."

"Significant gains could be attained through establishment of a systematic means of securing data on local and regional job market needs, to identify not only availability of jobs but specific skills required for employment."

Section 5

RESEARCH PRIORITIES

RESEARCH PRIORITIES

COMPARISON WITH TEAM MEMBERS' PRIORITIES

Just as the COPES judging panel's determination of rankings for critical needs for improvement differ markedly from the site visit teams' findings regarding evaluation items of greatest weakness at the eight representative colleges, so do the research priorities show only limited correlation with the critical needs rankings. (See explanation in Section 2.)

Yet, again paralleling the situation in regard to the critical needs, results from another phase of the COPES assessment process does concur closely with the researchers' conclusion. It also bears on the same question as that which faced the attendees at the community college research conference who established the research priorities.

This other phase involved the site visit team members. At the conclusion of each visit, the team members were asked to propose, on the basis of that specific visit, research priorities rank-ordered for importance. Table 2 compares their compiled responses with the priorities established by the researchers. Note that the team members' top priority was assigned to systematic follow-up (tied for second on the researchers' list) and their second priority to community needs analysis (first on the researchers' list).

COMPARISON WITH ITEM RATING LEVELS

It might also be observed that all five items established as the top research priorities were rated below the mid-point (3.0) of COPES'

Table 2

HIGH RESEARCH AND DEVELOPMENT PRIORITIES BY TWO METHODS

Votes of 43 CJCA Research Conference Professionals <u>1/</u>		Post-site visit Proposals of COPES Team Members <u>2/</u>	
Rank	Item	Rank	Item
1	3.18 Systematic collection and translation of information on community occupational education needs (population needs, labor market needs and opportunities)	1	Systematic follow-up, planned financing for same, a means of measuring success, and development of a model
2.5	2.3 Provision of educational opportunities consistent with community needs (e.g., population needs, labor market needs) for training, retraining, and upgrading personnel	2	Community needs analysis, perhaps statewide, and development of a model, means of identifying service area
2.5	3.12 Systematic follow-up of students who have completed occupational programs	3	Coordination of placement college-wide, better information on same, and development of a model
4	3.15 Use of job success and failure information of occupational education graduates in program evaluation and planning	4	Improved counseling and guidance, evaluation of these services and development of a model
5	4.14 Use of individualized instruction (e.g., programmed learning, self-paced instruction, tutoring).	5.5	Articulation with community and other educational agencies, especially with respect to needs analysis information
		5.5	Development and utilization of realistic measurable goals and objectives

1/ Respondents had selected and ranked ten items on importance in improving occupational education in California community colleges. Of their top 10 items, they then checked five (called votes) which would lend themselves most effectively to research and development. For greater detail see Appendix D, Table D-2.

2/ At eight representative California community colleges, COPES site visit team members identified top priorities for research and development designed to improve the quality and availability of occupational education. Open-ended debriefing forms, completed independently by each team member, were used. Rankings above are based upon number of times an item was proposed. See Appendix D, Table D-3.

five-point scale in composite tabulations from the eight colleges, as follows:

<u>Item</u>	<u>Rating Mean</u>
Systematic collection and translation of community needs information	2.25 ("below expectations")
Provision of opportunities consistent with community needs	2.875 (low "acceptable")
Systematic follow-up of students who have completed programs	1.625 ("below expectations" and lowest mean rating of all 60 items)
Use of job success and failure information	2.438 ("below expectations")
Use of individualized instruction	2.625 (low "acceptable")

COMPARISON, BY AREAS, WITH JUDGES' "NEED" RANKINGS

One additional point deserves mention here. Excluding "administration commitment" and "effective organization" items (including "articulation with other organizations"), the areas determined by the judges as critical needs for improvement relate well to the areas top-ranked for research priority. With both respondent groups, the "community needs" area (collecting needs information and providing educational opportunities consistent with needs) and the "follow-up" area (obtaining information and using it in program evaluation and planning) were rated first or second. This generalization is based upon combining the quantitative measures of the two related items in each of these areas (i.e., items 2.3 and 3.18 on "community needs" and 3.12 and 3.15 on "follow-up," shown in Tables D-1 and D-2). In these tables the quantitative measures for ranking judges' responses are scores and for ranking those of the research professionals are votes.

Section 6

OTHER FINDINGS OF INTEREST

OTHER FINDINGS OF INTEREST

VARIATIONS IN SITE VISIT TEAM RATINGS AMONG THE FOUR "ENROLLMENT SIZE" CATEGORIES

As noted in Section 1, the eight colleges selected for the COPES assessment were equally divided geographically (north, south) and on the basis of size in terms of occupational education average daily attendance (two each in the "small," "medium small," "medium large" and "large" categories).

No substantial variations in team ratings among these categories are discernible. Marginal differences are identified in the following paragraphs. Even with these, it must be recognized that, while interesting, they are certainly not conclusive because of the smallness of the sample.

The small colleges rated highest in "adequacy of instructional facilities," and lowest in "planned enrollments in relation to community needs," "actual program enrollments in relation to planned enrollments" and "provision of educational opportunities consistent with community needs."

The medium-small colleges rated highest in "development of measurable learner objectives in organizing programs," "use of measurable learner objectives in evaluating student performance" and "participation in development of district vocational education plan."

The medium-large colleges rated highest in "special provisions for the handicapped," "status of the occupational education dean or director position" and "balance between academic and occupational education interests on curriculum committee."

The large colleges rated highest in "salary schedule provisions," "use of advisory committees" and "participation of advisory committees in shaping programs."

Ratings on three items tended to rise in direct relation to enrollment size: "recruitment into occupational programs," "provision for coordination and direction," and "adequacy and availability of instructional materials."

VARIATIONS IN RATINGS AND RANKINGS AMONG RESPONDENT GROUPS

At each of the representative colleges, detailed COPES perceptions instruments were completed by three groups of respondents, in addition to the site visit team: (1) the president and/or his designate, to represent the official college position on the status of its occupational education system; (2) occupational faculty, including department heads and division chairmen; and (3) general administrators and counselors. Occupational faculty respondents numbered 345; generalists 125.

Some pronounced variations are encountered in comparing composite responses of these groups, as they pertain both to team ratings vs. those of the various college respondent groups and to college internal ratings from one respondent group to another. (A COPES evaluation instrument showing composite team and college group ratings is presented as Appendix E.)

Comparisons were made on the basis of the composite rankings accorded each of the 60 items by the site visit teams and the college respondent groups, and by determining the ranking-point spreads. Thus, a point spread of zero would indicate equivalency of ranking, and a point spread of 59 would indicate that the item had been ranked highest in one perception and lowest in the other.

The items on which the largest ranking-point spreads occur are cited below, as they relate to each area of comparison. (Point spreads

are in parentheses.) (Example: Site visit teams' composite rating of a COPES evaluation item ranks third highest among the total of 60 items. The official college position composite rating on the same item ranks seventh among the total of 60 items. The teams' rating, therefore, is higher by a ranking-point spread of four.)

Site visit team vs. official college position

Team ranking higher than college--adequacy of facilities (33), student recruitment (19), in-service education opportunities for faculty (19), coordination of placement services (17), placement effectiveness (16), follow-up of students who have completed transfer programs (16).

College ranking higher than team--participation in vocational education plan development (38), status of occupational education dean or director (36), advisory committee participation in shaping programs (30), use of advisory committees (26), awareness of college occupational educational goals by all faculty and staff (22).

Site visit team vs. occupational education faculty

Team ranking higher than faculty--contributions of equipment and funds (41), balance on curriculum committee (31), adequacy of facilities (29), use of paraprofessionals (29), adequacy of equipment (26).

Faculty ranking higher than teams--development of learner objectives (35), planned enrollments in relation to community needs (34), relation of learner objectives to job requirements (29), use of learner objectives (23), status of occupational education dean or director (21).

Site visit team vs. college generalists

Team ranking higher than generalists--placement effectiveness (32), use of paraprofessionals (27), student recruitment (26), adequacy of facilities (25), adequacy of equipment (25), contributions of equipment and funds (25).

Generalists' ranking higher than team--use of advisory committees (44), participation of advisory committees in shaping programs (34), status of occupational education dean or director (34), organization for effective coordination and direction of occupational education (29), participation in development of district vocational education plans(24).

SITE VISIT TEAM VS. ALL COLLEGE GROUPS

(All point spreads totaled)

Combining all college respondent groups, for comparison with site visit team rankings, sums up the variations. (Example: Site visit teams' composite rating of a COPEs evaluation item ranks third highest among their total of 60 items rated. The college official position composite rating on the same item ranks seventh among their total of 60 items. On their ratings, the occupational faculties' rating on this item ranks tenth highest; the generalists' rating ranks twelfth highest on their ratings. The teams' ranking, therefore, is higher by a total point spread of 20.)

TEAM RANKING HIGHER THAN COLLEGE GROUPS--ADEQUACY OF FACILITIES (87), CONTRIBUTIONS OF FUNDS AND EQUIPMENT (77), STUDENT RECRUITMENT (61), FOLLOW-UP OF STUDENTS WHO HAVE COMPLETED TRANSFER PROGRAMS (60), ADEQUACY OF EQUIPMENT (59), PLACEMENT EFFECTIVENESS (59).

COLLEGE GROUP RANKINGS HIGHER THAN TEAM--STATUS OF OCCUPATIONAL EDUCATION DEAN OR DIRECTOR (91), USE OF ADVISORY COMMITTEES (87), PARTICIPATION IN VOCATIONAL EDUCATION PLAN DEVELOPMENT (73), PARTICIPATION OF ADVISORY COMMITTEES IN SHAPING PROGRAMS (69), ORGANIZATION FOR EFFECTIVE COORDINATION AND DIRECTION OF OCCUPATIONAL EDUCATION (65).

Official college position vs. occupational faculty

College ranking higher than faculty--balance on curriculum committee (37), use of paraprofessionals (33), contributions of funds and equipment (30), awareness of college occupational education goals by all

faculty and staff (28), participation in development of vocational education plan (26).

Faculty ranking higher than college--development of learner objectives (36), use of learner objectives (34), relation of learner objectives to job requirements (28), placements in relation to completions (25), enrollments in relation to community needs (23).

Official college position vs. generalists

College ranking higher than generalists--use of paraprofessionals (31), balance on curriculum committee (21), promotion of occupational education (18), adequacy of equipment (17), coordination of placement services (17).

Generalists ranking higher than college--use of advisory committees (18), use of learner objectives (15), counseling and guidance to full-time college students (15), relating of general education courses to occupational education (14), development of learner objectives (14).

Occupational faculty vs. generalists

Occupational faculty ranking higher than generalists--enrollments in relation of community needs (23), development of learner objectives (22), placement effectiveness (21), use of learner objectives (19), relation of learner objectives to job requirements (17).

Generalists ranking higher than occupational faculty--participation of advisory committees (29), use of advisory committees (27), administrative commitment to occupational education (27), contributions of funds and equipment (16), balance on curriculum committee (16).

OFFICIAL COLLEGE POSITION VS. OTHER COLLEGE GROUPS

(All point spreads totaled)

COLLEGE RANKING HIGHER THAN OTHER GROUPS--USE OF PARAPROFESSIONALS (64), BALANCE ON CURRICULUM COMMITTEE (58), AWARENESS OF OCCUPATIONAL EDUCATION GOALS BY ALL FACULTY AND STAFF (57), CONTRIBUTIONS OF FUNDS AND EQUIPMENT (44).

PARTICIPATION IN DEVELOPMENT OF VOCATIONAL EDUCATION
PLAN (41).

OTHER GROUP RANKINGS HIGHER THAN COLLEGE--DEVELOPMENT
OF LEARNER OBJECTIVES (50), USE OF LEARNER OBJECTIVES
(49), RELATION OF LEARNER OBJECTIVES TO JOB
REQUIREMENTS (39), STUDENT PLACEMENTS IN RELATION TO
COMPLETIONS (37).

"DON'T KNOW" RESPONSES BY COLLEGE GROUPS,
ADVISORY COMMITTEE MEMBERS AND STUDENTS

High-percentage "don't know" responses to items on COPES perceptions instruments have real implications for college administrations in relation to occupational faculty and staff generalists, as well as for all involved college professionals in relation to students and advisory committees.

A striking example, applying to the immediately preceding comparison of "official college position vs. other college groups," is that roughly half of all college professional respondents were unaware of what the scope of staff participation had been in development of one-year and five-year district vocational education plans submitted to the state or whether the college's occupational programs were in concurrence with the annual plan. (This is particularly interesting in view of the fact that the mean rating of the eight college official positions on the participation item was "good," as was the official position mean on "awareness of occupational goals.")

One other significant example: More than half of the occupational student respondents marked "don't know" beside the items dealing with effectiveness of job placement and job success of students completing their particular programs. It would appear that the transmission of such information to students would be vital to realistic perspective concerning their hopes for jobs and their preparation for job success.

VARIATIONS IN TEAM RANKINGS AND RATINGS BETWEEN THE EIGHT SAMPLE COLLEGES AND TEN OTHER COLLEGES

In all, COPES evaluations were conducted at 18 California community colleges during the 1972-73 year. Eight of those colleges were participants in the assessment with which this report deals. The other 10 cooperated for purposes of system field-testing for further refinement.

Tables 3 and 4 compare the composite high and low rankings between these two institutional groups.

At the high end of the ranking scales, there are two noteworthy differences pertaining to items included among the "top 10" on one list and excluded on the other. "Administration commitment" was ranked fifth at the 10 system refinement colleges, with a "good" mean rating of 3.90. The same item was ranked 23rd at the eight representative colleges, with an "acceptable" mean rating of 2.94. "Vocational work experience," ranked ninth at the system refinement colleges, with a borderline "good" rating of 3.60, was ranked 24th at the representative colleges, with an "acceptable" rating of 2.88.

Lesser differences include these items: "Salary schedule provisions," ranked fifth at the representative colleges, with a "good" mean rating of 3.88, was ranked eleventh at the other colleges, with a borderline "good" rating of 3.55. "Updating of instructional content and methods," ranked eighth at the representative colleges, with a borderline "good" rating of 3.63, was ranked fifteenth at the other colleges, with a high "acceptable" rating of 3.45. "Adequacy of instructional equipment," ranked tenth at the representative colleges, with a high "acceptable" rating of 3.44, was ranked nineteenth at the cooperating colleges, also with a high "acceptable" rating, 3.25.

At the low end of the ranking scales, pertaining to items included among the "bottom 10" on one list and excluded on the other, a rating difference of more than one-half point is exceeded on only one

Table 3

HIGHEST RANKED COPEs ITEMS IN TWO GROUPS OF CALIFORNIA COMMUNITY COLLEGES AS JUDGED BY SITE VISIT TEAMS

Eight Representative Colleges		Ten Other Participating Colleges	
Rank	Item	Rank	Item
1	4.4 Qualifications of instructional staff	1	2.2 Quality of occupational instruction in general
2	4.5 Occupational experience of instructors	2	4.4 Qualifications of instructional staff
3	4.2 Qualifications of coordinator(s) and/or director(s)	3	4.5 Occupational experience of instructors
4	2.2 Quality of occupational instruction, in general	4	4.2 Qualifications of coordinator(s) and/or director(s)
5	4.9 Salary schedule provisions in relation to other professional staff within the college	5	3.1 Administration's commitment to occupational education
6	4.3 Number of instructors necessary for program effectiveness	6	4.12 Utilization of instructional facilities and equipment
7	4.12 Utilization of instructional facilities and equipment	7.5	4.13 Adequacy and availability of instructional materials (e.g., textbooks, reference books, visual aids, mock-ups).
8	3.21 Up-dating of instructional content and method in relation to current occupational practices and trends	7.5	4.17 Use of community resources in class instruction (e.g., field trips, outside speakers, borrowed equipment)
9	4.17 Use of community resources in class instruction (e.g., field trips, outside speakers, borrowed equipment)	9.5	2.7 Provision for vocational work experience in occupational education programs
10.5	4.11 Adequacy and availability of instructional equipment	9.5	4.3 Number of instructors necessary for program effectiveness
10.5	4.13 Adequacy and availability of instructional materials (e.g., textbooks, reference books, visual aids, mock-ups)		

Table 4
 LOWEST RANKED COPEs ITEMS IN TWO GROUPS OF
 CALIFORNIA COMMUNITY COLLEGES AS JUDGED BY SITE VISIT TEAMS

Eight Representative Colleges		Ten Other Participating Colleges	
Rank	Item	Rank	Item
50	3.12 Systematic follow-up of students who have completed occupational programs	60	3.13 Systematic follow-up of students who have dropped out of occupational programs
59	3.13 Systematic follow-up of students who have dropped out of occupational programs	58.5	3.9 College-wide coordination of placement services with occupational education curriculums
58	3.9 College-wide coordination of placement services with occupational education curriculums	58.5	3.12 Systematic follow-up of students who have completed occupational programs
56.5	3.2 Organization for effective coordination and direction of occupational education	57	3.18 Systematic collection and translation of information on community occupational education needs (population needs, labor market needs and opportunities)
56.5	3.17 Participation in development of one-year and five-year district vocational education plan submitted to state	56	2.10 Special provisions for the handicapped (i.e., physical, mental, emotional, and other health impairing handicaps)
54.5	3.7 Emphasis upon occupational education counseling and guidance: To adult and evening students	55	3.17 Participation in development of one-year and five-year district vocational education plan submitted to state
54.5	3.18 Systematic collection and translation of information on community occupational education need (population needs, labor market needs and opportunities)	54	3.15 Use of job success and failure information of occupational education graduates in program evaluation and planning
51.5	1.2 Development of measurable learner performance objectives in organizing occupational programs	53	3.4 Awareness of college's occupational education goals by all faculty and staff
51.5	1.5 Planned enrollments in relation to community needs (e.g., population needs, labor market needs)	51.5	4.8 Use of paraprofessionals (e.g., aides, teacher assistants)
51.5	3.4 Awareness of college's occupational education goals by all faculty and staff	51.5	3.14 Systematic follow-up of students who have completed college transfer programs
51.5	4.15 Use of advisory committees	50	1.9 Information on job success of former students in field of preparation

item: "special provisions for the handicapped." Ranked 56th at the other colleges, with a "below expectations" mean rating of 1.95, it was ranked 40th at the representative colleges, with a borderline "acceptable" rating of 2.56.

Lesser differences include these items: "Organization for effective coordination and direction," ranked 56th at the representative colleges, with a mean rating of 2.00, was ranked 47th at the other colleges, at 2.35; both ratings are "below expectations." "Emphasis on occupational counseling and guidance to adult and evening students," ranked 54th at the representative colleges, with a "below expectations" rating of 2.25, was ranked 40th at the other colleges, with an "acceptable" rating of 2.75. "Use of advisory committees," ranked 50th at the representative colleges, with a "below expectations" rating of 2.38, was ranked 35th at the other colleges, with an "acceptable" rating of 2.80. "Planned enrollments in relation to community needs," also ranked 50th at the representative colleges, was 45th at the other colleges, with a borderline "acceptable" rating of 2.55. "Development of learner objectives," also ranked 50th at the representative colleges, was 30th at the other colleges, with an "acceptable" rating of 2.90. "Use of job success and failure information," ranked 54th at the other colleges, with a rating of 2.15, was 46th at the representative colleges, at 2.44; both are "below expectations." "Systematic follow-up of students who have completed transfer programs," ranked 51st at the other colleges, with a "below expectations" rating of 2.30, was 34th at the representative colleges, with an "acceptable" rating of 2.71. "Use of para-professionals," also ranked 51st at the other colleges, with a "below expectations" rating of 2.30, was 32nd at the representative colleges, with an "acceptable" rating of 2.75. "Job success of former students," ranked 50th at the other colleges, with a rating of 2.33, was 46th at the representative colleges, at 2.43; both ratings are "below expectations."

APPENDIXES

APPENDIX A

EIGHT REPRESENTATIVE SAMPLE
CALIFORNIA COMMUNITY COLLEGES
PARTICIPATING IN CYPES IN 1972-73

EIGHT REPRESENTATIVE SAMPLE
CALIFORNIA COMMUNITY COLLEGES
PARTICIPATING IN COPES IN 1972-73

(Institutional size references relate to occupational education average daily attendance only.)

American River College

Sacramento

Site Visit: March 28-30

Large suburban college (one of three institutions of Los Rios Community College District), with a diversity of occupational programs--virtually all filled to capacity and some with long waiting lists. Established in 1955; moved to present campus in 1958.

Porterville College

Porterville

Site Visit: March 21-23

Small college serving large geographical area, essentially agricultural in nature, in Kern Community College District. Employment opportunities in area proliferating in non-agricultural fields, but on a relatively small scale. Established in 1927; has occupied present campus since 1955.

College of the Redwoods

Eureka

Site Visit: March 28-30

Medium small college occupying modern facilities on 275-acre site. Has experienced rapid expansion in enrollment, equipment and facilities. Established in 1964.

Riverside City College

Riverside

Site Visit: March 13-15

Large college serving a city of 150,000 population and environs. Has occupied present campus since 1921. Increasing emphasis on occupational education in recent years to meet needs of a diversified service economy. Established in 1916.

San Diego City College

San Diego

Site Visit: March 27-29

Medium large "inner city" college of the San Diego Community College District, with a multi-racial urban student population. Wide range of occupational programs, but--by district decision--no evening offerings; the district maintains a separately organized evening college. Has occupied present campus since 1956. Established in 1914.

San Jose City College

San Jose

Site Visit: February 21-23

Medium large urban college. Varied apprenticeship programs rank second in state in numbers of students served. Has occupied present campus since 1953; another San Jose Community College District institution is under construction. Established in 1923.

Santa Barbara City College

Santa Barbara

Site Visit: January 9-11

Medium small college with especially well developed adult and continuing education programs. Changing character and growth of community have led to increased college attention to occupational education. Has occupied present campus since 1959. Established in 1911.

West Hills College

Coalinga

Site Visit: February 6-8

Small college serving large area of low population density. Despite enrollment declines, interest in career programs has increased. Has occupied present campus since 1956. Established in 1932.

APPENDIX B

- B-1 COPEs SITE VISIT TEAM MEMBERS WHO VISITED
THE EIGHT REPRESENTATIVE CALIFORNIA
COMMUNITY COLLEGES
- B-2 SITE TEAM CHAIRMEN VISITING COLLEGES
NOT IN SAMPLE OF EIGHT REPRESENTATIVE
COLLEGES

Appendix B-1

COPEs SITE VISIT TEAM MEMBERS WHO VISITED THE EIGHT REPRESENTATIVE CALIFORNIA COMMUNITY COLLEGES

American River College

F. Parker Wilber,^{1/} President Emeritus, Los Angeles Trade-Technical College; Lenore H. Eisenstein, Chairman of Home Economics Department, Los Angeles Harbor College; John M. Hubbard, Assistant to Chancellor for Community Relations, San Mateo Community College District; Jim E. Kay, Executive Secretary, Governor's Committee on Employment of the Handicapped; Dr. Ray E. Loehr, President, Ventura College; Dick E. Whiteman, Dean of Vocational Education, Cerritos College. Guest participants: Dr. William R. Morris, Consultant in Evaluation, Division of Occupational Education, California Community Colleges; John S. Owens, Vice Chancellor-Vocational Education, Coast Community College District.

Porterville College

Glen R. Guldberg, Dean, Vocational Education, Citrus College; Edward Bratset, Educational Consultant; Francis J. Connors, Director of Education, California State Chamber of Commerce; Dr. John Petersen, President, Skyline College; John V. Russo, Dean of Technical Arts, Santa Ana College.

College of the Redwoods

John R. Luther, Acting Occupational Coordinator, Los Angeles Community College District; Edward Bratset, Consultant for Vocational Education; Dr. Arthur N. Cherdack, Coordinator of Institutional Research and Development, East Los Angeles College; Dr. Glenn G. Gooder, Superintendent-President, Santa Barbara City College; Virginia A. Gries, Director, Home Economics, Pacific Gas & Electric Company; Dr. Harvey B. Rhodes, President, Columbia College.

Riverside City College

John R. McKinley, Dean of Administrative Services, Chabot College; Francisca B. Baldwin, Coordinator of Services to Handicapped Students, Pasadena City College; Dr. Arthur N. Cherdack, Coordinator of Institutional Research and Development, East Los Angeles College; Charles C. Dahl, Associate Dean of Instruction for Occupational Education, Ventura College; Chester P. Gromacki, District Director of Vocational Education,

^{1/} First named is site visit team chairman. Each chairman also served on panel of 11 competent judges identifying priority needs for improvement.

Riverside City College Continued

Community College District of North Orange County; Laurie W. Larsen, Training Administrator, Garrett/Airesearch Manufacturing Company; Thomas D. Nesbitt, Consultant. Guest participant: Manque Winters, Consultant, Academic & Student Affairs Division, California Community Colleges.

San Diego City College

Jack Snyder, Dean of Occupational and Continuing Education, Cabrillo College; Roger D. Beam, Assistant Dean of Occupational Education/Program Planning and Development, Compton College; Eugene F. Connolly, District Manager, Pacific Telephone Company, Los Angeles; Dr. Robert E. Horton, President, Los Angeles Valley College; Shirley B. McGillicuddy, Home Economics Consultant; Thomas D. Nesbitt, Consultant. Guest participant: Dr. George W. Ebey, George Ebey Associates.

San Jose City College

Dr. Stuart E. Marsee, President/Superintendent, El Camino College; Irvin Colt, Director, Occupational Education, Mt. San Antonio College; Chester P. Gromacki, District Director of Vocational Education, Community College District of North Orange County; John M. Hubbard, Assistant to Chancellor for Community Relations, San Mateo Community College District; John R. McKirley, Dean of Administrative Services, Chabot College.

Santa Barbara City College

Jack Snyder, Dean of Occupational and Continuing Education, Cabrillo College; Rolf Bruckner, Associate Dean of Instruction, Gavilan College; Francis J. Connors, Director of Education, California Chamber of Commerce; Virginia A. Gries, Director, Home Economics, Pacific Gas & Electric Company; John M. Hubbard, Assistant to the Chancellor for Community Relations, San Mateo Community College District; Dr. Warren W. Sorenson, Assistant Superintendent-Education, West Valley Joint Community College District. Guest participants: Gary M. Jerome, Associate Research Analyst, Division of Occupational Education, California Community Colleges; J. Winston Silva, Specialist in Criminal Justice, Division of Occupational Education, California Community Colleges.

West Hills College

Dr. John C. Petersen, President, Skyline College; Dr. Glenn G. Gooder, President/Superintendent, Santa Barbara City College; Virginia A. Gries, Director, Home Economics, Pacific Gas & Electric Company; Hebert L. (Les) McCabe, Jr., Coordinator of Work Experience, Merced College; C. Allen Paul, Dean of Technical-Vocational Education, Grossmont College. Guest participant: Mary E. DeNure, Specialist in Public Services Occupations, Division of Occupational Education, California Community Colleges.

Appendix B-2

SITE TEAM CHAIRMEN^{1/} VISITING COLLEGES
NOT IN SAMPLE OF EIGHT REPRESENTATIVE COLLEGES

Nathan H. Boortz
Director, Technical Education
Foothill Community College District

Irvin Colt
Director, Occupational Education
Mt. San Antonio College

Clarence W. Mangham
Dean of Instruction
Contra Costa College

John R. McKinley
Dean of Administrative Services
Chabot College

Otto Roemmich
President/Superintendent
San Jose Community College District

^{1/} These site visit team chairmen were among the eleven competent judges, though the colleges they visited were not among the eight representative sample colleges.

APPENDIX C

RESEARCH CONFERENCE PARTICIPANTS

Appendix C

RESEARCH CONFERENCE PARTICIPANTS

George L. Becker
Research Assistant
Long Beach City College

Jack Bessire
Dean of Student Personnel
Monterey Peninsula College

John R. Boggs
Institutional Research Officer
Chaffey College

Richard Brightman
Director of Institutional Research
Coast Community College District

Harry Caughren
Counselor
Merritt College

Robert M. Clark
Counselor/Director of Research
Reedley College

Frances Compton
Trustee
Marin Community College

Bruce Conklin
Dean, Institutional Research
Pasadena City College

Charles E. Davis
Coordinator of Research
Los Angeles Trade-Technical College

Leo Day
Data Processing Manager
Los Rios Community College District

Carl Ehmann
Assistant Dean of Instruction
Cypress College

C. William Friedrichs
Administrative Assistant
College of San Mateo

Jean Gleis
Director, Research and Testing
Los Angeles Trade-Technical College

Ben Gold
Director of Research
Los Angeles City College

Phyllis Goldman
Testing Officer
Contra Costa College

James A. Grivich
Acting Director, Fiscal Services
Los Angeles Community College District

Robert E. Horton
President
Los Angeles Valley College

Milton Kielsmeier
Coordinator, Articulation and Research
Santa Rosa Junior College

Elbert L. Kinnebrew
Assistant Dean of Research and Development
Sacramento City College

Jerry Kjeldgaard
Cooperative Education Director
Hartnell College

Edward L. Krehbiel
Assistant to the Superintendent
Grossmont Community College District

Jim Lagerstrom
Director of Research
Los Angeles Pierce College

Russel Lewis
Dean, Continuing Education and
Instructional Services
Santa Monica College

David Lien
Dean, Career Education
Hartnell College

Fred Machetanz
Coordinator of Institutional Research
Los Angeles Valley College

Thomas MacMillan
Dean of Student Personnel Services
Gateway Community College

Judy Moss
Director of Research
San Francisco Community College District

Virginia Murdoff
Dean of Students
Napa College

Tom S. Phair
Placement Officer and Researcher
University of California, Berkeley

Paul P. Preising
Administrative Assistant, Grants
San Jose Community College District

William G. Preston
Director, Institutional Research
Diablo Valley College

Frank C. Roberts
Director, Institutional Research
Antelope Valley College

Lance E. Rogers
Director, Tutorial Programs
City College of San Francisco

Donald Ross
Trustee
Antelope Valley Community College

Gary Schaumburg
Director, Institutional Research
Cerritos College

Peter Selo
Director, Research and Development
Laney College

Gerald Sharp
Director, Educational Development
West Valley Community College

Marion J. Stoneking
Extended Day Coordinator
Cypress College

Thomas P. Wright
Director of Personnel
Rancho Santiago Community College
District

James Young
Director of Planning
Kern Community College District

APPENDIX D

Table 1: COPEs ITEMS GIVEN HIGH PRIORITY RANKINGS
BY ELEVEN COMPETENT JUDGES

Table 2: COPEs HIGH PRIORITY ITEMS WITH GREATEST
RESEARCH AND DEVELOPMENT POTENTIAL AS
JUDGED BY FORTY-THREE PROFESSIONALS
ATTENDING CJCA RESEARCH CONFERENCE

Table 3: RESEARCH AND DEVELOPMENT PRIORITIES
PROPOSED BY COPEs TEAM MEMBERS AFTER
SITE VISITS TO EIGHT REPRESENTATIVE
CALIFORNIA COMMUNITY COLLEGES

Appendix Table D-1

COPES ITEMS GIVEN HIGH PRIORITY RANKINGS BY ELEVEN COMPETENT JUDGES

	<u>Rank</u>	<u>Score</u> ^{1/}	<u>Votes</u> ^{2/}
3.2 Organization for effective coordination and direction of occupational education.	1	570	8
3.1 Administration's commitment to occupational education.	2	540	7
2.5 Articulation with other educational organizations in your area (e.g., high schools, other community colleges, regional occupational centers) in providing for community occupational needs.	3	520	9
2.3 Provision of educational opportunities consistent with community needs (e.g., population needs, labor market needs) for training, retraining, and upgrading personnel.	4.5	490	8
3.12 Systematic follow-up of students who have completed occupational programs.	4.5	490	7
2.7 Provision for vocational work experience in occupational education programs.	6	440	9
3.8 Emphasis upon occupational education counseling and guidance to high school students.	7	420	9
3.3 Status of occupational education dean or director position on the college "administration team."	8	390	7
3.15 Use of job success and failure information of occupational education graduates in program evaluation and planning.	9	380	8
3.18 Systematic collection and translation of information on community occupational education needs (population needs, labor market needs and opportunities).	10	370	6
3.6 Emphasis upon occupational education counseling and guidance to full-time college students.	11	360	9
4.22 Provisions in capital outlay budget for occupational education in general.	12	280	5
2.6 Relating of the college's general education courses (e.g., English, math) to occupational education.	13.5	220	3
4.14 Use of individualized instruction (e.g., programmed learning, self-paced instruction, tutoring).	13.5	220	5
4.6 In-service education opportunities for faculty, including conference attendance, curriculum development, work experience.	15	190	4
3.16 Promotion of occupational education's strengths, merits, and opportunities to the public and its decision-making representatives.	16	170	6

^{1/} Judges were asked to check top 10 of the 16 items, then rank them on importance in improving occupational education. A score of 100 points was assigned a first priority ranking, 90 points a second priority, and (decreasing by 10 points for each lower priority) 10 points for a tenth priority.

^{2/} Eleven judges, therefore 11 votes possible.

Appendix Table D-2

COPE'S HIGH PRIORITY ITEMS WITH GREATEST RESEARCH AND DEVELOPMENT POTENTIAL AS JUDGED BY FORTY-THREE PROFESSIONALS ATTENDING CJCA RESEARCH CONFERENCE

	<u>Rank</u>	<u>Votes for^{2/} Top Five</u>
3.18 Systematic collection and translation of information on community occupational education needs (population needs, labor market needs and opportunities).	1	36
2.3 Provision of educational opportunities consistent with community needs (e.g., population needs, labor market needs) for training, retraining, and upgrading personnel.	2.5	32
3.12 Systematic follow-up of students who have completed occupational programs.	2.5	32
3.15 Use of job success and failure information of occupational education graduates in program evaluation and planning.	4	29
4.14 Use of individualized instruction (e.g., programmed learning, self-paced instruction, tutoring).	5	15
2.7 Provision for vocational work experience in occupational education programs.	6	11
2.5 Articulation with other educational organizations in your area (e.g., high schools, other community colleges, regional occupational centers) in providing for community occupational needs.	7	10
2.6 Relating of the college's general education courses (e.g., English, math) to occupational education.	8.5	9
3.6 Emphasis upon occupational education counseling and guidance to full-time college students.	8.5	9
4.6 In-service education opportunities for faculty, including conference attendance, curriculum development, work experience.	10	8
3.16 Promotion of occupational education's strengths, merits, and opportunities to the public and its decision-making representatives.	11	6
3.2 Organization for effective coordination and direction of occupational education.	12.5	5
3.8 Emphasis upon occupational education counseling and guidance to high school students.	12.5	5
3.1 Administration's commitment to occupational education.	14	4
4.22 Provisions in capital outlay budget for occupational education in general.	15	3
3.3 Status of occupational education dean or director position in the college "administration team."	16	1

^{1/} Forty-three votes possible. Respondents had selected and ranked 10 items on importance in improving occupational education. Of their top 10 items, they then checked the five which would lend themselves most effectively to research and development. These choices are identified above as votes.

Appendix Table D-3

RESEARCH AND DEVELOPMENT PRIORITIES PROPOSED BY COPEs TEAM MEMBERS AFTER SITE VISITS TO EIGHT REPRESENTATIVE CALIFORNIA COMMUNITY COLLEGES

	<u>Rank</u>	<u>Score</u> ^{1/}	<u>Votes</u> ^{2/}
Systematic follow-up, planned financing for same, a means of measuring success, and development of a model.	1	1840	24
Community needs analysis (perhaps statewide), development of a model, and a means of identifying the service area.	2	1310	16
Coordination of placement college-wide, as well as better information on same, and development of a model.	3	1130	15
Improved counseling and guidance, evaluation of these services and development of a model.	4	810	12
Articulation with community and other educational agencies, especially with respect to needs analysis information.	5.5	510	9
Development and utilization of realistic measurable goals and objectives.	5.5	510	6
Effective organization and direction of occupational education, and development of a model.	7	500	7
Use of advisory committees, a means of providing the president with a schedule of meetings, and development of guidelines.	8	450	7
In-service education and workshops for occupational instructors, general educators and administrators, and counseling and guidance staff.	9	430	6
Counseling and guidance emphasis on vocational programs, including work experience.	10	410	5
Individualized instruction.	11	370	6
Promotion of occupational education to all faculty, the community, general administrators, and support for occupational education in general.	12	330	6
Provision for and identification of (also acceptance of) the disadvantaged and/or handicapped.	13	300	8
Meaningful, integrated occupational work experience programs.	14	290	6

1/ A score of 100 points was assigned a first priority ranking, 90 points a second priority, and (decreasing by 10 points for each lower priority) 10 points for a tenth priority.

2/ Number of times proposed by a team member on the open-ended debriefing forms completed independently by each team member. Excludes items mentioned fewer than five times.

APPENDIX E

COMPOSITE COPES PROFILES OF EIGHT REPRESENTATIVE
CALIFORNIA COMMUNITY COLLEGES BY FOUR RESPONDENT
GROUPS

Appendix E

COMPOSITE COPES PROFILES OF EIGHT REPRESENTATIVE CALIFORNIA COMMUNITY COLLEGES BY FOUR RESPONDENT GROUPS^{1/}

Legend: X = Site visit teams (N = 8)
 P = Official college position (N = 8)
 O = Occupational instructors, department
 and division heads (N = 345)
 G = Administrators and counselors (N = 125)

PERCEPTIONS OF OCCUPATIONAL EDUCATION

GOALS AND MEASURABLE PROGRAM OBJECTIVES

- 1.1 Goal(s) (broad purpose) for occupational programs.
- 1.2 Development of measurable learner performance objectives in organizing occupational programs.
- 1.3 Use of measurable learner objectives in evaluating student performance.
- 1.4 Relation of stated learner objectives to job performance requirements.
- 1.5 Planned enrollments in relation to community needs (e.g., population needs, labor market needs).
- 1.6 Actual program enrollments in relation to planned enrollments.
- 1.7 Student completions in relation to enrollments, including jobouts (i.e., students leaving school for employment in field of preparation prior to completing program of studies).
- 1.8 Student placements (employment or related advanced education) in relation to completions.
- 1.9 Information on job success of former students in field of preparation.

	1 Poor	2 Below Expectations	3 Acceptable	4 Good	5 Excellent
1.1			X	G	P
1.2		X	P	G	O
1.3		X	P	G	O
1.4		X	P	G	O
1.5		X	P	G	O
1.6		X	P	G	O
1.7		X	P	G	O
1.8		X	P	G	O
1.9		X	P	G	O

PROCESSES: INSTRUCTIONAL PROGRAMS

- 2.1 Concurrence of programs with district vocational education plan submitted to state annually.
- 2.2 Quality of occupational instruction, in general.

		X	G	P
			G	P
			O	X

PROCESSES: INSTRUCTIONAL PROGRAMS (continued)

- 2.3 Provision of educational opportunities consistent with community needs (e.g., population needs, labor market needs) for training, retraining, and upgrading personnel.
- 2.4 Growth and/or modification of offerings during past five years in response to community needs.
- 2.5 Articulation with other educational organizations in your area (e.g., high schools, other community colleges, regional occupational centers) in providing for community occupational needs.
- 2.6 Relating of the college's general education courses (e.g., English, math) to occupational education.
- 2.7 Provision for vocational work experience in occupational education programs.
- 2.8 Quality of work experience programs.
- 2.9 Special provisions for the disadvantaged (i.e., academic, socioeconomic, cultural, and related handicaps).
- 2.10 Special provisions for the handicapped (i.e., physical, mental, emotional, and other health-impairing handicaps).

1 Poor	2 Below Expectations	3 Acceptable	4 Good	5 Excellent
		X G P O		
		X G P O		
		G O X	P	
	X	G P O		
		X	G P O	
		X	G O	P
		X	G P O	
	P X O	G O		

PROCESSES: SUPPORT PROCESSES

- 3.1 Administration's commitment to occupational education.
- 3.2 Organization for effective coordination and direction of occupational education.
- 3.3 Status of occupational education dean or director position on the college "administration team".
- 3.4 Awareness of college's occupational education goals by all faculty and staff.
- 3.5 Balance between academic and occupational education interests on college curriculum committee.
- Emphasis upon occupational education counseling and guidance:
- 3.6 To full-time college students
- 3.7 To adult and evening students
- 3.8 To high school students

		X O	G P	
		X O	G P	
		X O	P G	
		X O	P G	
		O X	G P	
		X O	P G	
		P X O	G	
		P X G		

PROCESSES: SUPPORT PROCESSES (continued)

- 3.9 College-wide coordination of placement services with occupational education curriculums.
- 3.10 Effectiveness in placement of occupational education students completing programs.
- 3.11 Recruitment into occupational education programs.
- Systematic follow-up of students:
- 3.12 Who have completed occupational programs
- 3.13 Who have dropped out
- 3.14 Who have completed college transfer programs
- 3.15 Use of job success and failure information of occupational education graduates in program evaluation and planning.
- 3.16 Promotion of occupational education's strengths, merits, and opportunities to the public and its decision-making representatives.
- 3.17 Participation in development of one-year and five-year district vocational education plan submitted to state.
- 3.18 Systematic collection and translation of information on community occupational education needs (population needs, labor market needs and opportunities).
- 3.19 Coordination of college's community occupational education needs analysis with those of other planning agencies in the area.
- 3.20 Use of community occupational education needs information in modifying programs.
- 3.21 Up-dating of instructional content and method in relation to current occupational practices and trends.

	1 Poor	2 Below Expectations	3 Acceptable	4 Good	5 Excellent
3.9	X	G	P		
3.10			G X	P O	
3.11			G O X	P	
Systematic follow-up of students:					
3.12	X	P G	O		
3.13	X	P G O			
3.14		O X	P G		
3.15		P G O X			
3.16		X	G O	P	
3.17		X	O G	P	
3.18		X	P G O		
3.19		X	G O	P	
3.20			O X	P G	
3.21			O G X	P	

RESOURCES

- 4.1 Provision for coordination and/or direction.
- 4.2 Qualifications of coordinator(s) and/or director(s).
- 4.3 Number of instructors necessary for program effectiveness.

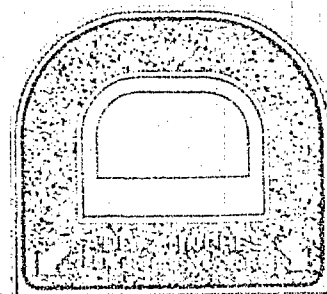
		X	P G O	
			G O	P X
			G O X	P

RESOURCES (continued)

- 4.4 Qualifications of instructional staff.
- 4.5 Occupational experience of instructors.
- 4.6 In-service education opportunities for faculty, including conference attendance, curriculum development, work experience.
- 4.7 Provisions for systematic evaluation of instructional personnel.
- 4.8 Use of paraprofessionals (e.g., aides, teacher assistants).
- 4.9 Salary schedule provisions in relation to other professional staff within the college.
- 4.10 Adequacy of instructional facilities, excluding equipment.
- 4.11 Adequacy and availability of instructional equipment.
- 4.12 Utilization of instructional facilities and equipment.
- 4.13 Adequacy and availability of instructional materials (e.g., textbooks, reference books, visual aids, mock-ups).
- 4.14 Use of individualized instruction (e.g., programmed learning, self-paced instruction, tutoring).
- 4.15 Use of advisory committees.
- 4.16 Participation of advisory committees in shaping programs.
- 4.17 Use of community resources in class instruction (e.g., field trips, outside speakers, borrowed equipment).
- 4.18 Contributions of equipment and/or funds from labor, business, industry, and the professions.
- Provisions in current operating budget for:
- 4.20 Occupational education in general.
- Provisions in capital outlay budget for:
- 4.22 Occupational education in general.

Poor	Below Expectations	Acceptable	Good	Excellent
			P O X	
			P O X	
		O X	P G	
		G O X		P
	G O X	P		
			O X	P G
	P O X	G O X		
		O X	G P	
		X O	P G O	
		G O X	P	
	X O	P G		
	X O	P O	G	
	X O	P G		
		O X	G P	
	O X	P G X		
		O X	P	
	O X	P G		

COPEs



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INCH MADE IN U.S.A.

COPEs (Community College Occupational Programs Evaluation System)

sponsored by the Chancellor's Office, California Community Colleges

STATUS REPORT: OCCUPATIONAL EDUCATION IN REPRESENTATIVE CALIFORNIA COMMUNITY COLLEGES

The COPEs service (goal: *to improve the quality and availability of occupational education in California community colleges*) has been utilized by more than 30 institutions throughout the state during the past two years to assist in their future planning and allocation of resources. Each evaluation has included college self-appraisal of its occupational education programs and services, and validation of the self-appraisal by a visiting COPEs team of California community college professionals and business, industry and public representatives. Feedback from more than 500 professionals at the participating colleges solidly demonstrates the value of COPEs; 37 per cent rated their appraisal experience *excellent* and 39 per cent *good*, while only one per cent regarded it *poor* and 7 per cent *below expectations*.

An especially important aspect of the project during 1972-73 was assessment of the status of occupational education in a representative sample of California community colleges, to identify strengths and needs for improvement, as well as to yield proposed priorities for future research and development dealing with the improvement needs. Following are the highlights of the findings. (The full report has been distributed statewide; additional copies may be requested of the Chancellor's Office.)

MAJOR STRENGTHS (Rated by Visiting COPEs Teams)

COPEs appraises occupational programs on the basis of 60 evaluation items. The ratings on each item were tabulated for all of the colleges involved in the status study. The 10 highest ratings, in rank order, were accorded to:

- *Qualifications of occupational education instructors.*
- *Occupational experience of occupational education instructors.*

- *Qualifications of occupational education coordinators and directors.*
- *Quality of occupational instruction, in general.*
- *Salary schedule provisions for occupational education professionals in relation to other professional staff.*
- *Number of instructors necessary for occupational program effectiveness.*
- *Utilization of occupational education instructional facilities and equipment.*
- *Updating of occupational education instructional content and method.*
- *Use of community resources in class instruction (e.g., field trips, outside speakers, borrowed equipment).*
- *Tie between Adequacy and availability of occupational education instructional equipment and Adequacy and availability of occupational education instructional materials.*

CRITICAL NEEDS (Determined by a Panel of Judges)

The 11 professional leaders who had been COPES team chairmen during 1972-73 served as a panel of judges to consider team strength-weakness ratings of evaluation items at the representative colleges and to identify 10 items which, in their judgement, if improved, would have the greatest impact on improving the quality and availability of occupational education in California community colleges. In rank order, the panel's identified items were:

- *College organization for effective coordination and direction of occupational education.*
- *College administration's commitment to occupational education.*
- *Articulation with other educational organizations in the college area (e.g., high schools, other community colleges, regional occupational centers) in providing for community occupational needs.*
- *Tie between Provision of educational opportunities consistent with community needs (e.g. population needs, labor market needs) for training, retraining and upgrading personnel and Systematic follow-up of students who have completed occupational programs.*
- *Provision for vocational work experience in occupational education programs.*
- *Emphasis on occupational education counseling and guidance to high school students.*
- *Status of occupational education dean or director on the college administration team.*
- *Use of job success and failure information of occupational education graduates in program evaluation and planning.*
- *Systematic collection and translation of information on community occupational education needs (population needs, labor market needs and opportunities).*

For purposes of comparison, deans attending a spring, 1973, conference of the Chancellor's Office and California community college administrators of occupational education were asked to follow the same procedure as that employed by the panel. Tabulation of 60 deans' responses showed a high degree of

correlation with the panel's judgments. For example, the deans ranked as the most critical need *administration's commitment*, gave second place to *provision of educational opportunities consistent with community needs* and third place to *organization for effective coordination and direction*. On the other hand, their fourth-ranked item was *emphasis on occupational education counseling and guidance to full-time college students*, and fifth ranking went to *provisions in capital outlay budget for occupational education in general*.

RESEARCH PRIORITIES (Identified by 43 Research Professionals)

To establish proposed research and development priorities, 43 professionals attending a California Junior College Association research conference were asked to select from the judging panel's *top 15* critical needs list the five items which would lend themselves most effectively to R&D. In rank order, the researchers' tabulated responses were:

- *Systematic collection and translation of information on community occupational education needs.*
- *Tie between Provision of educational opportunities consistent with community needs for training and retraining and upgrading personnel and Systematic follow-up of students who have completed occupational programs.*
- *Use of job success and failure information of occupational education graduates in program evaluation and planning.*
- *Use of individualized instruction.*

Again for comparison, as had been done with *critical needs*, the occupational education deans at the spring conference followed the same procedure as that employed by the research professionals. And again there was a significant degree of correlation. The deans gave top ranking for research priority to *provision of educational opportunities consistent with community needs*. Second place went to *systematic follow-up of students who have completed programs*; third, *systematic collection and translation of information on community needs*, and fourth, *use of job success and failure information of graduates in program evaluation and planning*. The deans' fifth-ranked item, however, was *organization for effective coordination and direction of occupational education*, while *use of individualized instruction* was 15th on their list.

THE COPES PROGRAM FOR 1973-74

EVALUATIONS TO BE CONDUCTED AT MORE COLLEGES: Some 15 California community colleges have made requests to the Chancellor's Office for a COPES evaluation of their occupational education programs during the 1973-74 college year. Moreover, to increase the roster of COPES visiting team

members, 10 or more additional persons—chiefly occupational education teachers—will be trained to implement the system and then will participate in evaluations.

SUBSYSTEMS TO BE APPLIED: Besides overall application of the COPES evaluation system at volunteer colleges, it is anticipated that the three subsystems developed in 1972-73 will be utilized at several institutions. These subsystems focus on special occupational education programs and services for (a) the disadvantaged and (b) the handicapped, and (c) on programs and services in the field of consumer and homemaking education. Guides and audio-visual orientation programs have been developed for all three of these subsystems.

RELIABILITY STUDY TO BE MADE: The reliability of the COPES instrumentation and methodology will be tested at five colleges. In each of these tests, validation of the college self-appraisal will be undertaken by two visiting teams, reporting separately and independently. Comparison of their findings at each college will yield valuable data on the degree to which the planned COPES goal of objectivity in evaluation has been assured by the design of the system. An additional aspect of COPES this year will be a study of the relationship between organizational characteristics and occupational system performance.

Project Leadership: Leadership of COPES is a cooperative enterprise. In response to initiative from the Chancellor's Office, local community college leaders were active in the inception and development of COPES. In the first two years, invaluable participation was provided from community colleges throughout the State. Supervision from the Chancellor's Office is assigned to Dr. Bill Morris, evaluation specialist. Foothill Community College District manages the project, with Dr. Nathan Boertz, district director of technical education, serving as project manager, and Dr. George Ebey, George Ebey Associates, as project director. Leadership in COPES continuing progress is provided by a broadly based planning and internal evaluation committee on which sponsor and management representation is augmented and enriched by prominent community college education generalists and occupational education specialists.

CHANCELLOR'S OFFICE,
CALIFORNIA COMMUNITY COLLEGES
825 Fifteenth Street
Sacramento, CA 95814

