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IDENTIFIERS *San Diego Community College District

ABSTRACT

In spring 1975, a Task Force of 35 members was established as an advisory committee and idea generation group for the San Diego Community College District. At each of three meetings, the 35 members divided into five work groups led by a vocational coordinator discussion leader. This description of and master plan for the San Diego Community College District's Career Education and Retraining Division is based on the proceedings of these meetings. Chapter I gives a summary of population and business statistics for the County and City of San Diego, presents a description of the Community College Manpower Training and Vocational Education Department, summarizes campus vocational education programs, and reviews a recent needs assessment survey. Chapter II presents a philosophy of career education, and chapter III presents a consultant's summary analysis of manpower futures in the United States to 1985. Chapter IV presents goals and objectives for career education, including organization, instruction, cost-effectiveness, student services, and futuristics. Chapter V deals with the problem of allocating programs to specific sites, and chapter VI lists nine recommendations to the Steering Committee for Management Studies and Educational Master Planning. (Author/NHM)

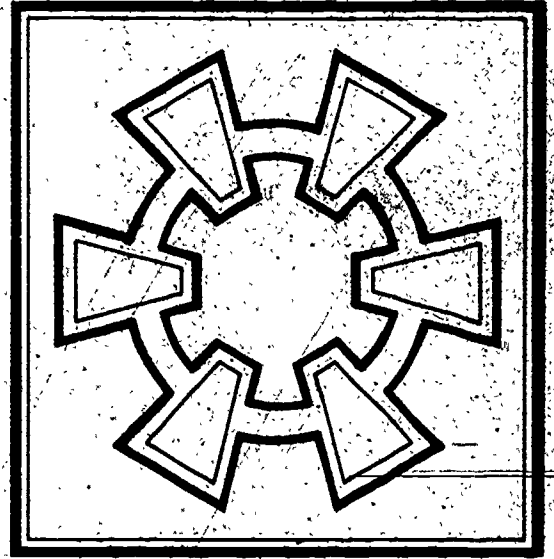
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EDUCATIONAL MASTER PLANNING AND MANAGEMENT STUDIES

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NATIONAL INSTITUTE OF
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THE NATIONAL CENTER FOR
EDUCATION STATISTICS
1974



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REPORT OF
TASK FORCE II
CAREER EDUCATION AND TRAINING

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SAN DIEGO, CA. 92108

842 091 21

REPORT OF
TASK FORCE II
CAREER EDUCATION AND RETRAINING

Submitted to
~~THE OFFICE OF MANAGEMENT STUDIES~~
AND EDUCATIONAL MASTER PLANNING
in partial fulfillment
of the charge given by the
Steering Committee for
Management Studies and Educational Planning
and the proposal for the
Charles Stewart Mott Foundation

May 30, 1975

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FORWARD

This report was prepared from the generation of ideas and objectives developed by the members of the San Diego Community Collège Master Planning Task Force II.

This body served as an advisory committee and idea generation group. They did their work in three meetings starting April 15, 1975 and ending May 14, 1975. The Task Force of about thirty-five active members divided into five work groups at each meeting. A vocational coordinator or other member was invited to serve as a discussion leader. Each leader presented after each meeting a report of the results of his or her group to the Executive Secretary. Occasional planning meetings were held with the group leaders and the Assistant Director of the Manpower Training and Vocational Education Office.

The Task Group members who participate are all to be congratulated on the range and wealth of ideas they generated. The membership of this Task Force is presented on Pages iii and iv.

The Executive Secretary chose to cover in the report as much breadth and detail as time allowed. In fact, he concluded after working a number of weekends and evenings that he had exceeded his time allowance rather generously.

Behind the decision to cover such a broad area with as much detail as possible is the belief that master planning is based on knowing the "territory" of what really happens in career education and what should happen there in the future. This is basically a semantic problem. It is using words to detail and communicate this "territory" of reality to others.

The more specific the words, the more detailed and hopefully the more accurately represented the "territory." The penalty for this effort at preciseness is the unsatisfactory length of this report. It is likely to overwhelm all but the most persistent readers. A summary has been prepared to assist those who need a fast total picture of the report.

It is anticipated people will use this volume or the comprehensive master plan that follows it as members of many operational groups which will be working on their particular part of bringing the plan into being. When viewed from the perspective of its operating parts, the length is not too long. The advantage of this approach is that each group will have a base with some detail upon which it can work and expand. The operational readers rather than the general readers were assigned the highest priority in the design of this report.

The reader must remember the information in this report is a "first out." It was rapidly and intensively prepared. This is the report's major limitation.

A few significant definitions are presented which, it is hoped, will clarify the meaning of these sometimes ambiguous terms as they are used here.

Respectfully submitted,



John A. Geddes
Executive Secretary
Task Force II

SAN DIEGO COMMUNITY COLLEGESEDUCATIONAL MASTER PLANNING

TASK FORCE II

Career Education and RetrainingSTUDENTS

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 Hanger, Steven

LOCATION

Adult -
 College - Mesa
 College - Mesa

NON-COMMUNITY COLLEGE

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 Cameron, Patricia
 Thomas, Barbara
 Frisinger, Joe
 Kelly, Curtis
 Kuck, Richard
 Role, Eldon

LOCATION

San Diego State University
 Southern California First National Bank
 San Diego Unified School District
 Mercy Hospital & Medical Center
 San Diego Community Colleges
 Pacific Telephone
 Employment Development Department

FACULTY

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 Beyer, William
 Jacobs, Ralph
 Eckhout, Patricia
 Gelles, Marianne
 Hunter, Frank
 Lietzman, James
 Maddox, Mike
 Nickerson, Frank
 Plummer, Leona
 Reed, Marjorie
 Robinson, Ruth
 Sauer, June
 Shaw, Gerald
 Smith, Diane
 Wolfe, Phyllis
 Hunter, Clare

LOCATION

Adult - Hoover
 College - City
 College - Miramar
 Adult - San Diego
 College - City
 College - City
 Adult - Skills Center
 College - Mesa
 College - City
 Adult - Midway
 College - Evening
 College - City
 College - Mesa
 College - Mesa
 College - Mesa
 College - Mesa
 Adult - Clairemont
 College - Evening

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LOCATION

Adult Education Division
 College - City
 District - Personnel
 College - Mesa

ADMINISTRATION

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 Bethel, Robert

LOCATION

College - Mesa
 District - Vocational Education

Coats, Walter
 Reed, Marjorie
 Gilman, C.W.
 Hamann, Clinton
 Hilsgen, James
 Johnson, Earl
 Rand, Hal
 Schlei, Donald

District - Vocational Education
 District - Vocational Nursing
 District - Vocational Education
 District - Vocational Education
 College - City
 Adult - Skills Center
 District - Vocational Education
 Adult - San Diego

RESOURCE STAFF

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 Maddox, Mike
 Miranda, Mark
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District
 Adult Centers
 Mesa - Student
 Adult Centers
 College - City

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SUMMARY

This report is divided into six chapters. The Present Picture Chapter I, gives a summary of population and business statistics for the County and City of San Diego. It then presents a description of our Community College Manpower Training and Vocational Education Department starting on page 8. A description of campus vocational education programs is summarized in charts beginning on page 19. Some factors significant to Career Education are reviewed in a summary of the Needs Assessment which concludes the chapter.

Chapter II presents a Philosophy of Career Education on page 32 which is the value foundation upon which many of the goals and objectives in this report are based. Chapter III starting on page 44 presents our consultant's summary analysis on manpower futures in the United States to 1985. Chapter IV is the vital core of the report. Here are presented the goals and objectives for Career Education. There are five primary Goals, Organization, Instruction, Cost-Effectiveness, Student Services and Futuristics. The objectives related to each goal are listed after the primary goal. The table of contents lists the various subcategories of objectives.

It is recommended that each objective be treated with a "change analysis" and be tentatively pegged onto a time line for implementation. The time line is divided into three general time periods which are labeled Phases I, II, and III. Pages 53 and 54 discuss this recommended treatment for objectives.

Chapter V on page 116 deals with the problem of allocating programs to sites. Program building blocks called Career Clusters have been designed for the San Diego Community Colleges. On the second try a procedure for classifying the complexity of courses was developed and integrated into a Basic Site Allocation Guide presented on page 121.

Chapter VI lists nine recommendations to the Steering Committee for Management Studies and Educational Master Planning starting on page 124.

DEFINITIONS

- I. Goal is a statement of general purpose used to set the direction and provide broad guidance for an organization, an informal group or an individual.
- II. Objectives are derived from goals. They are the action commitments through which the mission of a business or institution is to be carried out, and the standards against which performance is to be measured.¹ Drucker believes objectives should be capable of being converted into specific targets and assignments which can be used as the basis for and motivation for work and achievement.

Objectives must be able to guide management in its concentration of key resources of men, money, and physical facilities to accomplish the goals of the institution. Drucker states, "To manage a business (institution) is to balance a variety of needs and goals. And this requires multiple objectives."⁶

Objectives must degenerate into work. Work is specific. It has clear, unambiguous, measurable results, a deadline and a specific assignment of accountability. But it must also be used to flexibly accommodate the unforeseen.⁶

- III. Performance Indicators are measures which tell managers how closely they have come to their objectives in doing their work.
- IV. Career Education is a term in the process of being defined by our educational institutions. It is a relatively new synthesis of many concepts available at some point and in some place in American education.

⁶ Drucker, Peter F., Management, 1973

The concepts include vocational education, vocational guidance, career development, the development of the whole person, and other elements of the educational, industrial and community networks of which these concepts are a part. At the post high school level career education encompasses the traditional classifications of Business Education, Trade and Industrial Education, Technical Education, Office Education, Consumer and Homemaking, Health Careers and Agricultural Education.

Edwin Herr has studied an array of definitions of Career Education. He believes the meaning of the term includes at least the following:

1. An effort to diminish the separateness of academic and vocational education.
2. An effort to integrate the practicality of the real world into the educational disciplines offered in our colleges from kindergarten through graduate school.
3. "A process of insuring that every person exiting from the formal educational structure has job employability skills of some type.
4. A direct response to the importance of facilitating individual choice making so that occupational preparation and the acquisition of basic academic skills can be coordinated with developing individual preference.
5. A way of increasing the relevance or meaningfulness of education for greater numbers of student than is currently true.
6. A design to make education an open system in that (job outs, drop outs, and completions) can affiliate with it, when their personal circumstances or job requirements make this feasible.

7. A structure whose desired outcomes necessitate cooperation among all elements of education as well as among the school, industry, and community.
8. An enterprise requiring new technologies and materials of education (i.e., individualized programming, simulation).
9. A form of education for all students.¹⁰

Item 2 developed by Herr was deleted and a locally generated definition developed to replace it.

The terms Technical and Vocational Education are closely related kinds of instruction which prepare students to enter any one of a variety of occupations in a common cluster.

- V. Vocational Education is more manipulative in skill with less related theory. The instruction time is normally shorter than in technical education. The majority of retraining programs tend to be vocational.
- VI. Retraining is a series of programs, usually vocational in nature, which prepare people to enter another occupation or become more proficient in their present one. Retraining is carried out in cooperation with business, industrial or governmental enterprises to meet particular manpower needs.
- VII. Occupational Extension includes any program developed because of a specific need in industry. The programs may be nontraditional as to number of hours per week and length of course of study. The programs may be open entry or open exit and offered in the San Diego Evening College or the Adult and Continuing Education Centers.

10. Herr, Edwin L., Review and synthesis of foundations for Career Education. March, 1972. p.3

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**GRAPHIC DISPLAY OF THE DIFFERENCE BETWEEN
TECHNICAL AND VOCATIONAL EDUCATION AND RETRAINING**

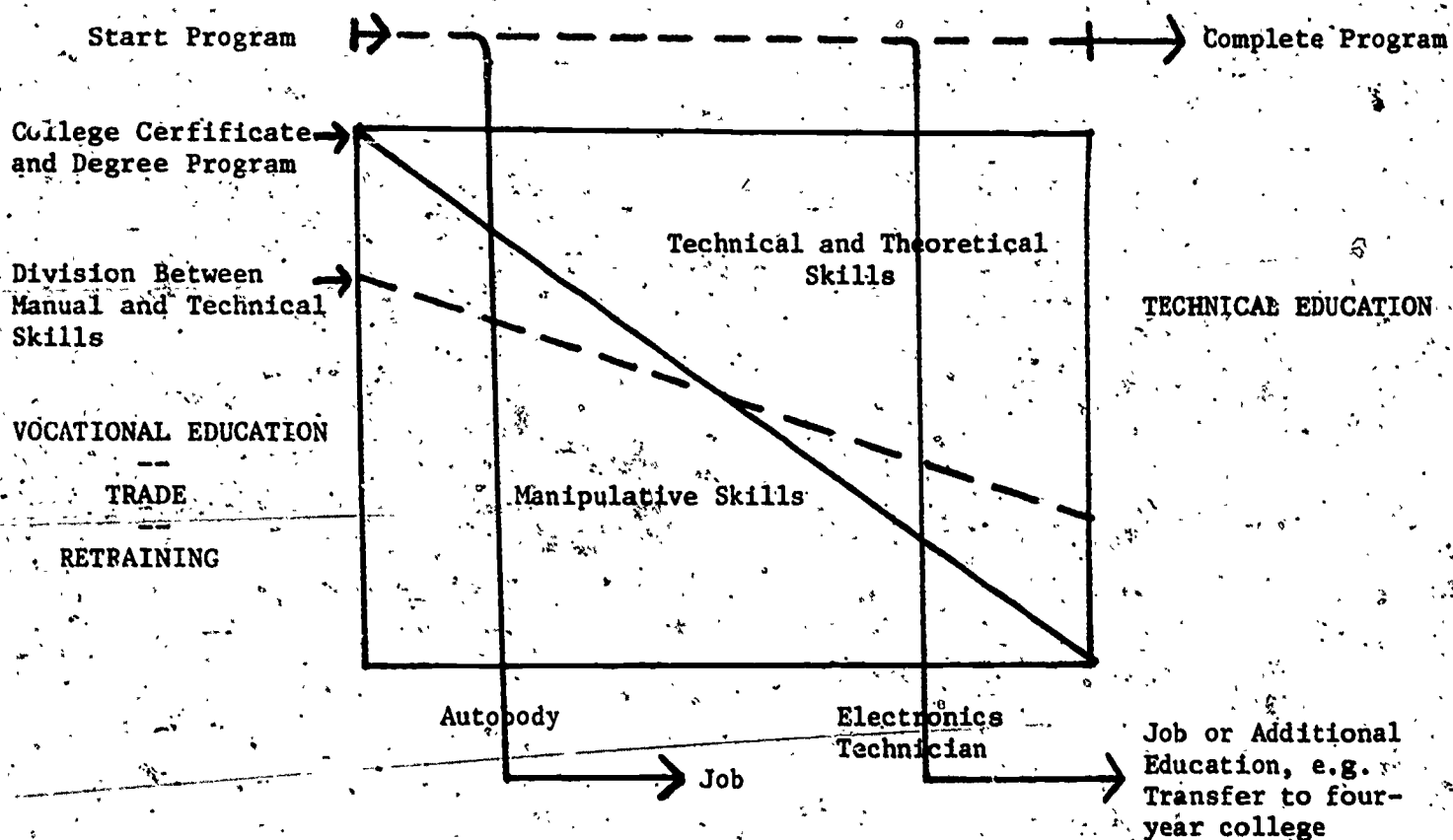


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CHAPTER I

THE PRESENT PICTURE

Southern California, one of the most dynamic areas of the world between 1960 and 1975, has come a long way from the sleepy collection of "Rancho's" of the mid-nineteenth century. Embracing the ten southern most counties of California, Southern California has a land area amounting to 58,685 square miles.

The number of people living in Southern California comprises almost three-fifths of California's total population. One economic yardstick for measuring the economic well being of a region is the growth of its population. The average annual increase in population in Southern California from 1960 to 1969 amounts to 285,000.

THE GREATER COMMUNITY OF SAN DIEGO

San Diego is the southern most county in Southern California located next to the growing city of Tijuana across the border in Mexico. It figures 426.7 square miles in size. The city of San Diego has a growing harbor complex, rail lines to Los Angeles and broad highways north, east, and south to the border. It has a major airport close to the center of the city, two middle sized airports further east and two major naval airdromes plus auxiliary fields.

The naval establishment, other government operations; tourism, retirement living, health and business service; financial, insurance, and real estate enterprises; retail trade; transportations and shipping, aircraft and the space industry; electronics and related industries; and construction are the major enterprises which produce economic stability in the greater municipal area of the City of San Diego.

Chapter I

The population growth of San Diego County has been rapid. In 1960 the population figure stood at 1,033,011. By 1970, it had increased to 1,357,854. Today the population is about 1,500,000. The city of San Diego is the main focus of county population. According to the San Diego City Planning Department predictions of 1973, the city had a total population of 697,027 people in 1970. This number had expanded to 755,900 by 1974.⁷ In 1980, the population is predicted to reach 857,000 and by 1990, 996,000.³

County wide, an estimate of our future growth is 1,800,000¹⁵ people by 1985 and 2,546,700 by the year 2,000.⁷

The San Diego Community College District provides a large share of the educational services San Diegans need in the area of Vocational Education. Southwestern College serves Chula Vista and Grossmont College serves the greater El Cajon area. In addition, many San Diegans use the S.D.C.C. as a way station on the career path to a four-year college.

The employment picture in San Diego County has been one of rapid expansion until recently. The total number of civilians employed in 1971 was 491,000. The number has increased steadily. In 1974, the number reached 614,800.

Historically, the unemployment rate has been high:

1971 - 8.8%

1973 - 7.7%

1972 - 6.8%

1974 - 8.8%¹³

-
- 7. Feldman, p. 8 Needs Assessment
 - 3. Planning Department, City of San Diego
 - 15. San Diego County Planning Data
 - 13. San Diego 1974 Business Survey

Chapter I:

The unemployment rate is now around 10%. It is considerably higher in the construction industry.¹³

The employment by industry group is:¹³

	<u>1974</u>
Nonagricultural Wage & Salary Workers	460,300
Mineral Extraction	600
Construction	27,600
Manufacturing	71,200
Food and Kindred	4,100
Apparel	3,900
Printing and Publishing	5,000
Chemicals	1,000
Lumber, Wood and Furniture	1,500
Stone, Clay and Glass	1,400
Metals	2,600
Machinery excluding Electrical	7,700
Electrical Machinery	12,800
Aerospace	21,200
Shipbuilding and Repair	6,100
Miscellaneous Manufacturing	3,900
Transportation, Communications, Utilities	23,300
Wholesale Trade	15,400
Retail Trade	84,700
Finance, Insurance & Real Estate	24,400
Services	94,300
Government	118,800
Federal	37,100
State & Local	29,400
Education	52,300
Agriculture	11,300

13. San Diego 1974 Business Survey

Chapter I

Each enterprise listed employs workers in many different occupational specialties. The community colleges offer many programs which prepare people for occupational entry into a variety of positions in these enterprises.

The current recession has slowed job demand in many occupations; nevertheless there is demand for workers in many technical and vocational specialties. The need for retraining unemployed workers to meet new job demands is strong. The need to bring, through occupational extension, job upgrading has many characteristics of an untapped market. Most large enterprises in San Diego such as Government, the utilities, or the multi-branch banks may not realize how the community colleges can assist them in their own job upgrading and staff development programs. The San Diego 1974 Business Survey has been included as Appendix A. It has economic indicators which describe the nature of the employment community for which the community colleges is training workers.

The vocational education effort of the community colleges is organized at this time, into a District office of manpower training and vocational education and various campus managers who administer vocational education programs. The District organization is managed by an Assistant Director of Vocational Education who reports to the Director of Instructional and Student Services. The Assistant Director manages eleven Vocational Education Coordinators who coordinate approximately 137 different occupational programs.



Chapter I

The functions of the District organization are to coordinate district-wide activities, develop programs, and maintain liaison with the community through Advisory Committees. The function of the respective campus organizations is to administrate under the authority of their chief site administrator, the vocational education instructional program and participate in Advisory Committee work. They also relate directly to the community.

The City, Mesa, and Evening Colleges vocational education programs are administered by Deans of Vocational Education. They use coordinators to help them establish new programs as subject matter consultants, and as links with the community.

The Adult Center principals and the Skill Center under the San Diego Adult Center principal administer vocational education programs under the direction of the Director of Adult Education. Considerable direct support is given by the District Vocational Education Coordinators.

The Director of the Educational Cultural complex reports to the Chancellor of the District. He manages his own rapidly growing vocational education program with considerable support from the District Coordinators.

S.D.C.C. VOCATIONAL EDUCATION

The Vocational Education Department of the District has had a staff responsibility with the colleges and the Adult Division since 1971. A limited line responsibility still exists for (1) apprenticeship program, (2) off-campus classes held in local businesses and industrial plants, (3) the operation of special projects such as the CAL-OSHA project and the Kellogg Foundation project, and (4) certain special Vocational Education Art projects.¹⁶

16. Steinberg, District Memorandum

Chapter I

The coordinators are technical specialists. They are assigned a trade or employment cluster and become experts in the needs of that trade. If in their area of expertise a short-term training program is needed, they coordinate with the Adult Division to implement it. If an upgrading course is necessary, they coordinate with the Evening College to implement it. The responsibilities of each of the coordinators cross all of the institutional boundaries of the District.¹⁶

The central office responsibilities for vocational education are:

- a. Provide district-wide coordination for all vocational programs.
- b. Develop a District plan for vocational education
- c. Prepare applications for funds and develop special programs under the various state and federal acts.
- d. Keep campus vocational staff informed of the current trends in business and industry and provide continuous information on job opportunities.
- e. Establish and maintain cooperative relationships with agencies on the local, state, and national levels concerned with and related to vocational education.
- f. Evaluate community needs in cooperation with lay and professional groups and recommend new courses, curriculums, and revisions to meet their needs.
- g. Verify legal requirements and standards for credentialing vocational instructors.

16. Steinberg, District Memorandum.

Chapter I

- h. Establish and provide the necessary services for all Vocational Advisory Committees.
- i. Keep site administrators informed regarding vocational standards.
- j. Coordinate the overall planning of vocational facilities with the administration staff, and advisory committees.
- k. Recommend allocation of vocational programs to the colleges and adult schools.
- l. Plan and organize manpower training and retraining through the San Diego Regional Employment and Training Consortium.
- m. Plan and organize the program of apprenticeship training.
- n. Plan and organize Regional Occupations Program in cooperation with site administrator.
- o. Work cooperatively with the county School Districts and the Area XII Vocational Planning Committee to develop a cooperative procedure for area planning and improved articulation.
- p. Provide the necessary records and reports as required under the Vocational Education Act.¹⁶

The organizational relationships between the District Manpower Training and Vocational Education Department and the campus and center organizations which directly manage the instructional programs has changed gradually through the years. The Management Studies Report, Study of Vocational Education, of May 6, 1975, points out present problems involved in this relationship.

16. Steinberg, District Memorandum

Chapter I

Many of the coordinators have been assigned to the coordination staff for ten or more years. When they first began their assignment, they were program managers. Over the years, even with the changes in the District organization, they have been held accountable as program managers.

Campus administrators of the District, however, did not accept these definitions of the coordinator's role. Even though the Deans of Vocational Education, several years ago, were instructed by the Deputy Superintendent to follow the lead of the vocational coordination staff instead of their own college presidents in areas concerning vocational education, they did not accept this philosophy and they do not accept it today. They feel that, as line managers they have the ultimate responsibility for the vocational education programs under their jurisdiction.

Department Chairmen have similar feelings. They feel that in too many cases, Vocational Coordinators usurp their authority and stand as a buffer between the faculty and the community.

The report of May 6, 1975 points out that coordination is a much more complex task than the direct management of the vocational education programs.

Coordination must do many of the same things which management does, but without the delegated authority. This requires that the coordinator deal effectively on a broad scope, with a wide range of individuals, in the area of communications, liaison, maintenance of minimum standards and providing educational leadership.³

The full report of May 6, 1975 is included as Appendix B.

3.A Study of Vocational Education, May 6, 1975

Chapter I

A summary of District involvement in Vocational Education is presented on the next pages. Technical education programs on the college campuses are shown as well as occupational extension education in the college and adult divisions. The special programs in Vocational Education, the activities in support of Vocational Education, the project funding and the areas of Coordinators responsibility are also summarized.

Chapter I

DISTRICT INVOLVEMENT IN VOCATIONAL EDUCATION

Community of San Diego

Technical Education

<u>Campus</u>	<u>City</u>	<u>Mesa</u>	<u>Miramar</u>
Number of majors	48	33	3
Number of courses/semester	336	337	49
Number of instructors contract	58	60	10
Number of instructors hourly	33	34	10 + 160 academy

Occupational Extension Education - College Division

<u>Location</u>	<u>City</u>	<u>Mesa</u>	<u>Miramar</u>	<u>Kearny</u>	<u>Bell</u>	<u>Pershing</u>
Number of majors offered	41	47	3	14	2	11
Number of courses/semester	169	200	35	19	6	21
Number of instructors contract	1	2	0	0	0	0
Number of instructors hourly	136	150	27	23	6	19

Occupational Extension Education - Adult Division

<u>Location</u>	<u>Skills Center</u>	<u>ECC</u>	<u>Hoover Crawford</u>	<u>Midway</u>	<u>Clairemont</u>	<u>Henry</u>
Number of majors offered	11	10	9	6	5	5
Number of courses/semester	15	38	63	56	73	65
Number of instructors contract	12	2	5	10	2	1
Number of instructors hourly	5	34	36	18	66	38

Chapter I

Special Programs in Vocational Education

066 Campus

Number of locations	37
Number of majors offered	30
Number of courses/semester	92
Number of instructors contract	0
Number of instructors hourly	80
Enrollment	2,332

Trainee/Apprentice/Journeyman Training

Number of trades	31
Number of trainee/pre-apprentice	83
Number of apprentices	
a. Male	1,615
b. Female	22
Number of journeymen	116
Number of instructors contract	0
Number of instructors hourly	91

High School Programs

Number of contributing high schools	
a. Public	20
b. Private	4
c. Out of district	2
Number of majors offered	20
Number of instructors contract	18
Number of instructors hourly	5
Enrollment	211

Regional Occupational Program

Number of programs	9
Number of instructors	12
Number of counselors	3
Enrollment	300

Activities in Support of Vocational Education

<u>Related Service</u>	<u>Location</u>	<u>Personnel</u>	<u>Function</u>
Learning Laboratories	733 Eighth Avenue, San Diego, CA 92101	2½ contract instructors 1 hourly instructor 1 clerk 2 aides	Brush up basic skills, preparation for GED, make up high school credits
	1720 Euclid Avenue San Diego, CA 92105	1 contract instructor 1 hourly instructor 1 clerk 2 hourly aides	Prepare non-high school graduates for GED and brush up of basic skills.
Work Experience	District Headquarters and Mesa, City, and Miramar Colleges Day and Evening	1 vocational coordinator 5 full-time work experience coordinators	Identify and enroll students, coordinate work experience with employers. Assure maintenance of proper records.
Placement and Follow-up	Skills Center and Mesa, City and Miramar Colleges	3 full-time placement and follow-up coordinators	Assist in placement and compile placement and follow-up reports
Career Planning and Counseling	Clairmont Adult Henry Adult Hoover-Crawford Adult Midway Adult North Shores Adult San Diego Adult Skills Center ECC	2 counselors 1 counselor 2 counselors 1 counselor 2 counselors 2 counselors 4 counselors	Academic and vocational counseling
Career Testing Center	Adult Career Guidance Services 1608 Fifth Avenue San Diego, CA 92101	2 counselors 1 part-time counselor 3 clerks	Vocational counseling, ROP enrollment center, and GED testing center.
Advisory Committees	107 from throughout the community	Over 1,000 non-school representatives serve	Offer advice on various aspects of each certificate or degree program.

Activities in Support of Vocational Education (continued)

<u>Related Services</u>	<u>Location</u>	<u>Personnel</u>	<u>Function</u>
San Diego Community College, District Department of Manpower Training and Vocational Education	3375 Camino del Rio, South San Diego, CA 92108	1 assistant director of Vocational Education 8 coordinators of Vocational Education	Coordinate districtwide activities, develop programs, and maintain liaison with community through advisory committees.
Site Administration	Skills Center; City, Evening, Mesa, Miramar; and Adult Schools	3 teacher-coordinators 2 deans of Vocational Education 2 deans of Instruction 7 principals 18 department chairmen	Administrate the on-going.

Project Funding

VEA Part A - Disadvantaged	\$ 125,000
VEA Part B - Regular Program	663,004
VEA Part F - Consumer and Homemaking	36,520
VEA Part G - Cooperative Work Experience	25,000
VEA Part H - Work Study	14,241
California Real Estate Association	2,000
CETA	631,000
Kellogg Foundation for Dental Auxiliary Project (for three years)	97,000
Foster Parent Education Project	22,000
Consumer Project	8,000
Total Program Expenditures for 1973-74	7,222,679

Chapter I

COORDINATORS AREAS OF RESPONSIBILITY

The following lists show the areas of curriculum responsibility which the Coordinators assigned to the District Office of Manpower Training and Vocational Education Services have been assigned.

*Vocational Education*COORDINATORS' AREAS OF RESPONSIBILITYBOB BETHEL

Architectural Drafting
 Auto Body
 Auto Mechanics
 Automotive Air Conditioning
 Building Construction Technology
 Building Trades
 Cabinet Making & Millwork
 Civil Engineering
 Diesel Technology
 Drafting, Mechanical, Electronics
 Engineering
 Motorcycle Mechanic
 Small Gas Engine Repair
 Surveying
 Truck Driver Training

Apprenticeship

Automotive
 Carpentry
 Diesel
 Drywall
 Insulation
 Mill Cabinet
 Surveying

FLORENCE DOWNS

Emergency Medical Care
 Hospital-Home Aide
 Hospital Staff Training
 Medical Assistant
 Medical Laboratory Assistant
 Medical Record Technology
 Physical Therapy Assistant
 Radiologic Technology
 Registered Nurse
 Vocational Nursing
 Water & Sewage Technology

Apprenticeship

Cement Masons
 Machinist
 Welding

WALTER COATS

Aviation Maintenance Technology
 Aviation Occupations
 Electronics Tech./Broadcast Telecom.
 Landscape Construction Mech.
 Laundry & Dry Cleaning
 Machine Shop
 Manufacturing Technology
 Nursery & Landscape Technology
 Occupational Safety & Health Technology
 Shipbuilding
 Telecommunications
 Welding

Apprenticeship

Bricklaying
 Convair
 Floor Covering
 Sheet Metal
 Triple "A" South

CARL JOHNSON

Commercial Art
 Copier/Microfilm Tech.
 Cosmetology
 Graphic Reproduction
 Micrographics
 Photography
 Sign Arts (Silk Screen)
 Technical Illustration
 Technical English, Math, Science

Apprenticeship

Barbering
 Ironworking
 Lathing
 Plastering

High School Program

Accounting
 Banking & Finance
 Business Administration
 Business Mid-Management
 Business Womens' Professional Growth
 Escrow
 Fashion Merchandising
 Flight Attendant
 Floral Merchandising
 General Office
 Grocery Merchandising
 Instructional Aide
 Insurance
 Interior Decoration & Home Furnishing
 Library Technology
 Marketing Management
 Medical Clerical
 Purchasing & Materials Management
 Real Estate
 Secretarial
 Transportation & Distribution Management

Apprenticeship

Roofing

POSITION TO BE FILLED

Air Conditioning & Refrigeration
 Appliance & Refrigeration
 Electricity
 Electronics Tech.
 Electronics Assembly
 Lineman Installer/Cable TV
 Metrology
 Quality Control & Reliability
 Residential Heating & Air Conditioning
 Steamfitting

Apprenticeship

Electricity
 Electronics Service Technician
 Irrigation & Lawn Sprinklerfitter
 Pipefitting
 Plumbing
 Refrigeration
 San Diego City Civil Service
 San Diego Gas & Electric
 Sound Technician

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Custodial
 Data Processing
 Food Service Occupations
 Governmental Administration
 Governmental Management
 Hotel-Motel Management
 Industrial Supervision
 Institutional Housekeeping
 Marine Electronics Instrumentation
 Marine Occupations
 Plastics Technology
 Postal Supervision
 Recreational Leadership
 School Food Service-Management
 Supervision

Apprenticeship

Glazing
 Meat Cutting
 Naval Air Station
 Painting & Decorating
 Taping (Drywall)

Work Experience Education

FRED DEUTSCH (Miramar)

Criminal Justice

C. W. GILMAN

Dental Assistant
 Dental Hygiene

RUTH MORRIS

Child Development
 Custom Dressmaking & Alterations
 Home Economics
 Power Sewing

DICK ROSSMAESSLER (Miramar)

Fire Science

Chapter I

PRESENT CLUSTER AND SITE ALLOCATION OF PROGRAMS

The following pages show the present clustering of occupational programs. The programs marked F are programs planned at this time for the future by the District Manpower Training and Vocational Education Department.

The following chart shows at which present sites each program is located. The chart also shows the categories into which programs have been clustered.

X = ONGOING F = FUTURE

CITY COLLEGE
 MESA COLLEGE
 MIRAMAR COLLEGE
 EVENING COLLEGE
 SKILLS CENTER
 E.C.C.
 MIDWAY
 CLAIREMONT
 HOOVER-CRAWFORD
 NORTH SHORES

	CITY COLLEGE	MESA COLLEGE	MIRAMAR COLLEGE	EVENING COLLEGE	SKILLS CENTER	E.C.C.	MIDWAY	CLAIREMONT	HOOVER-CRAWFORD	NORTH SHORES
AGRICULTURE										
Nursery & Landscape Technology		X		X		F				
Landscape Construction Tech.					X					
BUSINESS										
Accounting	X	X	F	X						
Advertising	F	X		X						
Banking and Finance	F			X						
Teller						X				
Business Administration	X	X	F	X						
Court Reporting	F			F						
Data Processing	X	X		X			X			
Programming	X						F			
Keypunch						X	X			
Machine Operator	X			X			X			
Display	X			F						
Escrow			F	X						
General Office	X	X	F	X	X	X	X	X	X	X
Insurance (General)	F		F	X						
Insurance Adjusting			F	F						
Insurance Appraisal			F	F						
Interior Design	X	X		F						
Investments	F			X						
Marketing	X	X		X						
Fashion Merchandising	X	X		X						
Floral Merchandising				X		X				



Chapter I

X = ONGOING F = FUTURE

CITY COLLEGE
 MESA COLLEGE
 MIRAMAR COLLEGE
 EVENING COLLEGE
 SKILLS CENTER
 E.C.C.
 MIDWAY
 CLAIREMONT
 HOOVER-CRAWFORD
 NORTH SHORES

BUSINESS (CONTINUED)

Marketing (Continued)

Grocery Merchandising

Retail Clerk

Purchasing

Real Estate

Residential Property Mgmt.

Secretarial

Bilingual Secretary

Legal Secretary

Medical Secretary

Receptionist

Insurance Secretary

ELECTRICAL-ELECTRONICS

Electrical, Industrial

Electrical Wireman

Electrical Lineman

Electro-Mechanical Tech.

Cable TV Lineman/Installer

Electronics Technology

Cable TV Technology

Broadcast Telecommunication

Computer Technology

Service Technician

Radio-TV Repair



Chapter I

X = ONGOING F = FUTURE

CITY COLLEGE
 MESA COLLEGE
 MIRAMAR COLLEGE
 EVENING COLLEGE
 SKILLS CENTER
 E.C.C.
 MIDWAY
 CLAREMONT
 HOOVER-CRAWFORD
 NORTH SHORES

ELECTRICAL-ELECTRONICS (CONT.)

Marine Instrument Technology

Electronics Assembly

ENGINEERING

Civil Engineering

Drafting:

Architectural Drafting

Engineering Drafting

Electronic Drafting

Marine Drafting

Engineering Technology

Metrology

Quality Control

Surveying

ENVIRONMENTAL & HUMAN SERVICES

Urban Planning Technology

Water Treatment Technology

Waste Water Technology

Cosmetology

Custodian

Flight Attendant

Instructional Aide

Laundry & Dry Cleaning

Legal Assistant

Chapter I

X = ONGOING F = FUTURE

CITY COLLEGE
 MESA COLLEGE
 MIRAMAR COLLEGE
 EVENING COLLEGE
 SKILLS CENTER
 E.C.C.
 MIDWAY
 CLAIREMONT
 HOOVER-CRAWFORD
 NORTH SHORES

HEALTH SERVICES (CONT.)

Operating Room Technology

Optometric Assistant

Orthopedic Assistant

Pediatric Assistant

Pharmacist's Assistant

Physical Therapist's Assistant

R. N. Practitioner

Podiatrist's Assistant

Psychiatric Tech.

Radiographic Technology

Speech Therapist's Assistant

Recreation Therapy

HOME ECONOMICS & FOOD SERVICE

Clothing Construction

Consumer Education

Family Relations

Foods and Nutrition

Home Decorating

Home Management

Child Development

Custom Dressmaking & Alterations

Power Sewing

Food Service Management.



Chapter I

X = ONGOING F = FUTURE

CITY COLLEGE
 MESA COLLEGE
 MIRAMAR COLLEGE
 EVENING COLLEGE
 SKILLS CENTER
 E.C.C.
 MIDWAY
 CLAIREMONT
 HOOVER-CRAWFORD
 NORTH SHORES

HOME ECONOMICS & FOOD SERVICE (CONT.)

Fast Food Service Management

Baking

Catering

Hostess-Waitress

MANAGEMENT AND SUPERVISION

Governmental Management

Governmental Administration

Hotel-Motel Management

Institutional Housekeeping Mgmt.

Marketing Management

Mid-Management

Purchasing & Materials Mgmt.

Supervision, Industrial

Supervision, Postal

Transportation & Distribution Mgmt.

Small Business Management

PROTECTIVE SERVICES

Criminal Justice

Correction Worker

Immigration Officer

Investigative Assistant

Business & Industrial Security

Fire Protection Technology 38



Chapter I

X = ONGOING F = FUTURE

CITY COLLEGE

MESA COLLEGE

MIRAMAR COLLEGE

EVENING COLLEGE

SKILLS CENTER

E.C.C.

MIDWAY

CLAIREMONT

HOOVER-CRAWFORD

NORTH SHORES

TRADE & INDUSTRY

Aeronautics:

Aviation Maintenance Tech. X X

Air Traffic Control X F

Aviation Administration X F

Flight Operations X F

Air Conditioning & Refrigeration. X X

Building Trades:

Building Construction Tech. X F

Brick Laying F X

Cabinet Making & Millwork X X

Cement Masonry F X

Construction Trades Mgmt. X

Drywall X

Floor Covering X

Insulation X

Ironworking X

Lathing X

Plastering F X

Pipefitting X

Residential Kitchen Planning X X

Residential Heating & Air Cond. X

Roofing X

Sheet Metal X

Plumbing X

Graphics:

Commercial Art X X F

Graphic Reproduction X X X X

Photography X X F

Chapter I

X = ONGOING F = FUTURE

CITY COLLEGE
 MESA COLLEGE
 MIRAMAR COLLEGE
 EVENING COLLEGE
 SKILLS CENTER
 E.C.C.
 MIDWAY
 CLAIREMONT
 HOOVER-CRAWFORD
 NORTH SHORES

TRADE & INDUSTRY (CONT.)

	CITY COLLEGE	MESA COLLEGE	MIRAMAR COLLEGE	EVENING COLLEGE	SKILLS CENTER	E.C.C.	MIDWAY	CLAIREMONT	HOOVER-CRAWFORD	NORTH SHORES
Technical Illustration.	X		X							
Silk Screen Printing			X							
Equipment Repair:										
Appliance & Refrigeration	X				X					
Industrial Sewing Mach. Rep.									F	
Offset Printing Rep.									F	
Copier-Microfilm Tech:	X									
Power Mechanics:										
Auto Body & Painting	X		F	X	X	X				
Auto Mechanics	X		F	X	X	X	F			
Auto Air Conditioning	F				X					
Auto Upholstery					X					
Diesel Mechanic			F	X						
Heavy Duty Equip. Mech.			F	F						
Motorcycle Mech.	X		F		X					F
Small Gas Engines					X					F
Marine Occupations:										
Marine Technology		X	F	X						F
Fleet Engineering	X									
Mobile Home & Rec. Vehicle Repair								F		
Occupational Safety	F			X						
Machine Shop	X			X	X					
Irrigation & Lawn Spklr. Ftr.				X						
Plastics Technology		X		F						
Furniture Upholstery									F	



Chapter I

X = ONGOING F = FUTURE

CITY COLLEGE

MESA COLLEGE

MIRAMAR COLLEGE

EVENING COLLEGE

SKILLS CENTER

E.C.C.

MIDWAY

CLAIREMONT

HOOVER-CRAWFORD

NORTH SHORES

TRADE & INDUSTRY (CONT.)

Technical Illustration

Silk Screen Printing

Equipment Repair:

Appliance & Refrigeration

Industrial Sewing Mach. Rep.

Offset Printing Rep.

Copier- Microfilm Tech.

Power Mechanics:

Auto Body & Painting

Auto Mechanics

Auto Air Conditioning

Auto Upholstery

Diesel Mechanic

Heavy Duty Equip. Mech.

Motorcycle Mech.

Small Gas Engines

Marine Occupations:

Marine Technology

Fleet Engineering

Mobile Home & Rec. Vehicle Repair

Occupational Safety

Machine Shop

Irrigation & Lawn Spklr. Ftr.

Plastics Technology

Furniture Upholstery

Shipfitting & Pipefitting

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Welding



Chapter I

X = ONGOING F = FUTURE

CITY COLLEGE
 MESA COLLEGE
 MIRAMAR COLLEGE
 EVENING COLLEGE
 SKILLS CENTER
 E.C.C.
 MIDWAY
 CLAIREMONT
 HOOVER-CRAWFORD
 NORTH SHORES

TRADE & INDUSTRY (CONT.)

Driving:

Truck

Bus

Barbaring (App)

Meat Cutting (App)

Sound Tech (App)

X

X

F

F

Chapter I

NEEDS ASSESSMENT

The previous sections were written to give you an idea of the community context in which the San Diego Community Colleges exist and a general description of the vocational education effort in the San Diego Community College District. In summary form the previous pages have described where we are now.

If we are to develop a master plan which is our ultimate goal, we need to know where we are now, where we want to go, and how to get there.

The first prerequisite for learning where we want to go is a Needs Assessment. The one Needs Assessment available to us at this time, is Report Number One, Community Survey, April 21, 1975.⁵

The report represents the perception of a randomly selected sample of community citizens. Other reports will follow indicating the perception of students, staff and community opinion leaders. This report may be used in examining the perceived needs of the general community in regard to:

- a. Community awareness of the San Diego Community College System.
- b. Usage and potential usage by the community of specific programs, community college services, and facilities.
- c. Community opinions regarding modification of existing educational programs and services.
- d. Community perceptions related to how well the San Diego Community College System is doing in meeting the educational needs of the residents of San Diego.⁵

If you wish to review the findings of the Needs Assessment Report, it is available in the District office of Master Planning and Management Studies.

5. District Wide Needs Assessment Report

Chapter I

Some of the major findings of the report which are of particular interest to the Career Education and Retraining Task Force are:

1. Eight out of ten respondents have heard the name "San Diego Community Colleges," but 34 percent of the respondents were not aware that they could take courses at any of the District's colleges without paying tuition (pp. 13-14).
2. While the respondents showed a high degree of awareness regarding the types of education offered by community colleges as opposed to four year colleges, 47 percent of the respondents were not aware that the S.D.C.C. provide vocational education. (p.14).
3. Low usage is made of the District's various non-credit community services. (p.19)
4. The top four programs in terms of community priority were opportunities for physically handicapped, survival skills, training students to be wage earners, and vocational education.

The fifth was job placement, the seventh vocational and job counseling, the eighth training students to be learners.

In all, various elements of vocational education were given higher priority than areas dealing with the Arts and Sciences.

Providing personal and psychological counseling, and training students to be consumers were the only two Career Education related items which were located in the lower half of the items.

Chapter I

5. There appear to be no significant barriers posed by any of the operations of the District which prevent residents from taking classes. (p.33) What's more, 73 percent of those surveyed indicated they felt the District was doing a good job in meeting their needs (p.24). One major exception to this fact was that only 28 percent of the respondents rated admissions and enrollment procedures as "good" or "very good" (p.15).⁵

There can be no question that the needs and wants of the community focus in large part upon the area of this Task Force. Our goals and objectives will have to show a way to meet many of the needs expressed by the people in the community of San Diego. This challenge will require change in the years ahead; it will require a reallocation of the resources available to the San Diego Community College District. A carefully conceived Master Plan is an optimum way to approach the problem of change.

Chapter I has described briefly the community of greater San Diego. Both population trends and employment trends were included. A description of our Community College Manpower Training and Vocational Education Department followed. The campus vocational education programs are summarized which details the site make up of our career education efforts. The concluding topic was some of the more important findings in the Needs Assessment study which pointed out that Career Education is uppermost in the minds of many San Diegans.

5. District Wide Needs Assessment Report, April, 1975

CHAPTER II

A PHILOSOPHY OF CAREER EDUCATION

The job of Task Force II is to take a "first cut" at the beginning stage of developing a master plan. Once a picture is drawn of where we are now, and this was done in Chapter I, we can move on to the next area of inquiry, where do we want to go?

The first step in getting the range on where we want to go is the creation of a philosophy, in this case a philosophy of career education. Goals and objectives will be inferred from this philosophy.

TENTATIVE PHILOSOPHY OF CAREER EDUCATION

Viewed through the universal lense of that body of knowledge called anthropology, education is the preparation of youth for the assumption of adult roles in a society. This concept common to all societies has been enriched in recent years in the United States by adding the idea that education can be lifelong, and can be used to improve the way people live in our society.

The most dramatic characteristic of advanced societies, including ours, is the increasingly rapid rate of cultural change. This change has been produced in large part of scientific and technological developments in such areas as the knowledge explosion, transportation, communications and information handling, biology, medicine, and the physical sciences, construction and architecture, labor saving-innovations, and the management science.

Rapid cultural change can produce maladjustments in society called cultural lag. Our "style of living" including certain values, cultural expectations, religious beliefs, occupations, and institutions can be put out of adjustment with new technical ways of doing things. For example, today's young people leaving our schools may expect to face an average of five or six career changes in their working lifetime. Many of these changes will be caused by technological obsolescence.

Chapter II

Some futurists believe the majority of occupations to be filled twenty years from now are not yet organized. Nevertheless, many of them will evolve out of current occupations and work organizations. The implication of this prediction is that workers in many enterprises will need periodic retraining.

A major task of our society is to catch up, then get ahead in the planning, so that when changes which affect our culture do come upon us, we will be better prepared to deal with the lag or "out of adjustment" process.

I -

Work includes far more than practicing certain skills and knowledges on the job. An occupation is a "style of living." The people you meet, the values which surround you, the environment you live in most of your waking hours are dictated largely by the characteristics of your occupation and the enterprise in which it exists.

In essence a person fills an occupational role when he or she enters an occupation. Such a role is more complex and irreversible than the role an actor plays in the theatre, but both actor and worker have to meet expectations other people have about them; in turn both expect other people to act towards them in certain ways. Large groups of people in our society place different levels of prestige and acceptance on different occupations.

The self concept of the person, including all of what he believes he is, interacts with the occupational role the person enters. This interaction can produce satisfaction or maladjustment and unhappiness in the person, depending upon how well he fits into the role.

Chapter II

For example, a casting director would never cast a plump, slow moving, slow talking woman as Joan of Arc. An employer would not hire a mechanic who was all "thumbs." A worker who does not enjoy persuading people might find some salesmen jobs boring.

Attitudes and values are shaped and reinforced by the life style people live. They are shaped to reinforce and support many of the activities and interactions people live through when fulfilling a particular occupational role. A minister in a midwestern city would be supported by the value "love thy neighbor." A combat infantryman going up "Pork Chop Hill" in the Korean War would be supported by a different value.

Many workers in our society feel trapped or isolated in a job or occupation they do not enjoy their quality of living is far below their potential for self-fulfillment. Career education offers such people the chance to find more fulfillment in their work.

SELF ACTUALIZATION

There is a powerful drive in most of us to fulfill our potential, to reach out and tread along those paths we dream of treading, to imagine ourselves in a more fulfilled state of being. We are driven to learn in greater breadth and depth about those areas which interest or excite us.

This powerful motivation to fulfill our potential more and more, called self actualization by some, is blocked-distorted and shriveled when we are not able to meet the more basic needs all of us have. The need for security, love and belonging, self esteem including confidence, achievement, independence and competence, and self actualization are all thwarted to some degree if the person is not able to deal effectively with the basic problems of living in this complex society of ours.

These needs are usually dependent upon earning a living and dealing with the many complex tasks that are a part of our society. They are really our survival needs. When a person is struggling "just to make it" or is unable to make it, it is pretty hard to dream of an ideal.

The highest priority in a philosophy of career education is "the student learns above all to survive, because survival is an absolute prerequisite to reaching that state of human fulfillment called self actualization."

II

Community colleges have the opportunity to play a vitally constructive role in the unending, often frustrating effort our society must make to reduce cultural lag. Community colleges also have the potential to help students find an occupational role which suits them. They are on the front line. In many cases our community colleges do prepare students to enter a majority of the more populous occupations.

The basic question is: "Will community colleges prepare students to deal effectively with the present and to learn enough about the future to survive and flourish in it?"

The emerging discipline of the management sciences will be used by the community colleges to increase its probability of achieving organizational and cost effectiveness in answering this question.

Chapter II

Career education, though an integral part of the educational program, possesses the tap root of the community colleges' contribution to society; namely the giving of opportunities to our citizens to survive and flourish occupationally in tomorrow's world as well as in today's.

Career education is a broad concept in the process of being developed. It synthesizes the ideas of vocational education which include technical education and retraining, professional preparation, career development, vocational guidance, the development of the whole person and other strands of the educational, industrial and community networks of which these concepts are a part.

At the post high school level, career education encompasses the traditional classifications of Business Education, Trade and Industrial Education, Technical Education, Office Education, Homemaking, Health Careers, and Agricultural Education.

Career education embraces the concept that each individual must learn to function effectively in seven life roles. These can be seen as seven great strands running through the school curriculum. Dale Parnell, Cancellor of the San Diego Community Colleges, identified them as, experiences related to the roles of citizen, consumer, learner, wage earner, the reviewing self, the physical and mental self, and the family member. The first four strands comprise the primary areas of accountability for the schools. The latter three are shared with the home and other agencies and represent the secondary areas of accountability for education.¹⁰

10. Parnell, "The Images and Realities of Career Education," 1975

Chapter II

Inherent in career education is an effort to diminish the separateness of academic and occupational education. It also includes the idea that every person exiting from the formal educational structure should have job employability skills of some type. Career education is an open entry system for all students.

Chancellor Dale Parnell in a recent speech expanded further the concept of career education. He spoke of inaccurate image of career education in the minds of many educators and members of the public.

One is the "dumb-smart" image.

Regardless of the research and despite our rhetoric about the uniqueness of each individual, many people still advocate that "academic" means advanced, and is for the "smart" students and that career education is for the "dumb" students.

The fact is, that only a fraction of the occupations in our economy require a collegiate bachelor's degree for entry, yet much of secondary school curriculum is preparatory for college entry. Most American high schools have been geared to fill the needs of students intending to enroll in institutions of higher education.

Public education will not be serving most of our students' needs until educators and parents change unreal images in their minds. Career education is for all students - slow learners and fast learners - and includes all occupations, not just some of them. A brain surgeon has a career which requires career education; so does an auto mechanic.

There is another image dimension that needs changing. Willard Wurtz of the National Manpower Institute said recently:

There's just one world and its name is life. Until we realize that what we're talking about is not just

Chapter II

a transitional policy for kids but a continuing opportunity for exchange all through life...we're simply perpetuating the nonsense that life is divided into three times: youth for education, adulthood for work, and old age for the denial of the opportunity for either of them.⁴

III

The student should understand that the search for a satisfying career is really the process of trying to introject ones concept of oneself into his concept of an occupational role. The interaction between these views of oneself and role produce feelings of preference we perceive as "the degree to which we would like to work in that occupation."

The reliability of these feelings mean, "are my feelings of preference really going to be the same when I get into the occupation as they are now, as I visualize myself in that occupation?" The reliability depends on how realistically and detailed I view myself on the one hand, and how realistically and detailed I view the occupational role on the other.

If a person holds an unrealistic view of his social skills, levels of performance and potential to learn, and if the person has a fantasy view of an occupational role, he can bring them together and easily perceive feelings of strong preference for that occupational role. To the person those feelings are valid. He feels them; he knows they are there. The problem is that they are not reliable.

4. College Board News, "National Forum Focuses on Economic Crisis in Education." College Entrance Examination Board, New York, January 1975.

Chapter II

As the person moves through occupational training and into the occupation, he learns more about the reality of that occupation, and he may learn more about who he really is. Upon entry the real interaction between the person and the role begin and his feelings of preference then may change more. They are now realistic and reliable, but he may be bored or even dislike the occupation for which he spent so much time and effort in preparation. Remember, when he selected his training program he had strong feelings of preference for the occupation, but they were unreliable.

The challenge of career education is to minimize this waste of effort which happens to so many people who go through our schools. The career education approach to resolving this problem is an integration of the counseling and instructional processes. A step by step summary of this process would include the following:

1. The person is helped to develop a realistic picture of his assets, his weaknesses, his potentialities for growth. Evaluations such as vocational interest-inventories and performance level measures, insight from occupational exploration and work experience all generate reality oriented self knowledge. The person learns how to use this information in developing career maturity. The student is taught how to use career choice strategies which emphasize alternate choices and how to cope. All of these activities help the person develop a more realistic and reliable self concept.
2. The person also develops a realistic picture of how work is organized into occupations. He learns how many occupations are used in different enterprises such as transportation, construction or government. The person learns the general characteristics of different occupations. He learns how occupations relate to some personality factors and to performance factors. He learns a comprehensive and realistic view of what is the world of work.

Chapter II

3. The learner is shown career exploration principles and techniques. He learns how to start exploring in a particular direction by using his self knowledge information. He learns how occupational analysis techniques can assist him in the development of realistic occupational role concepts. He learns a process of closure toward one or a related cluster of occupations. He explores occupational roles through work experience. He learns effective job seeking techniques, social kinds of work skills and attitudes which increase his desirability as an employee.

The activities in #1 tend to produce more realistic self concepts. The activities in #2 and #3 help the person learn how to develop realistic occupational role concepts and how to locate those occupational roles which offer a high prediction for satisfactory adjustment. The activity in #3 is an exploratory process in which the person introjects his self concept in his imagination and through work experience into carefully researched occupational role concepts. But in addition, the very act of exploring helps the person increase his understanding of himself.

4. The person learns how to develop an educational plan which can take him from where he is now to occupational entry in the occupation of his choice. The plan may involve retraining, technical education, vocational education or preparation for transfer to a four year college. Program planning brings an integration of the instructional program into harmony with the needs of the student.
5. Career education uses the occupational role, both present and future as a focal point for curriculum and program development. Such curriculum and programs are organized to include knowledges, work skills, problem solving and analytical skills, social skills, and attitudes which a person may use in all of his related life roles, but particularly in the role of producer on the job.

Chapter II

6. The person learns career decision-making techniques and an alternate choice strategy so that he can bring closure and make a reasonable career decision. The decision accounts for his unique individuality. The process integrates information about self knowledge, the world of work, career exploration and educational planning in a way that helps the person make an optimum and reliable choice.
7. The person is provided a college service of job placement wherever possible that is consistent with the person's choice process.

To summarize, the career education approach helps the student develop a reliable self concept and a reliable occupational role concept. It teaches him to explore and close toward an occupation or career cluster. It helps him develop an instructional plan which will carry him toward his career goal or along the path of his career choice strategy. The student has confidence he will learn in his occupational program the skills and knowledges needed on the job in his community.

Chapter II

VI

A critical requirement for career education is the creation of a highly-skilled Futures Analysis team which can study and predict alternate futures and the impact each one will have on community college outcomes. The team can assist planners in Career Education to adjust their programs and services to best meet present and future manpower needs. This function is closely related to the career education program development function performed for the most part by District vocational "coordinators."

Evaluation is the final element in a philosophy of career education. All of the various parts of the philosophy from application of the management sciences through curriculum, instruction, guidance, placement, survival, and adjustment of the educational consumer in society, to futures analysis will be assessed in particular ways. The evaluations will show the degree of effectiveness with which the community college is approaching fulfillment of its various goals and objectives.

Assessment information will be arranged in such a way that it can be used as constructive remedial feedback into the college operation which produces educational outcomes. The goals and objectives to be produced by our force translate this philosophy of career education into an operational language.

This philosophy has given a general view of where the community colleges want to go in the years ahead. The picture of the future is sharpened more when a summary of the general manpower future is added in Chapter III. Further detailing of the future occurs when goals and objectives are included. This part of the picture is presented in Chapter IV.

Chapter II

The values expressed in the philosophy will be reflected in one of the five major goals, or sub goals related to them, or in the objectives. In each instance the objectives are derived from the goals and sub goals. When the goals, sub goals and objectives listed here have been achieved, we will have arrived into the future which is detailed in part by our choice.

CHAPTER III

THE MANPOWER FUTURE

Dr. Thomas L. Gillette, Chairman Department of Sociology, at San Diego State University prepared a Futures Manpower Study for this Task Force dated May 29, 1975. It is a summary of the manpower future in the United States. It has been included verbatim in Chapter III because it does summarize this broad subject. The chart on the next page presents and overview of occupational distributions between 1975 and 1985.

As Gillette points out, the areas of greatest growth in actual jobs will be in the Professional and Technical areas. Substantial growth will also occur in the category of Managers and Administrators, and Clerical Workers.

One point should not be overlooked as the reader speculates on the occupational areas of high growth. It is Gillette's statement, "Another phenomenon is a potential supply that is greater than potential requirements for college graduates beginning in the late 1970's in jobs traditionally held by these workers." The implication is that the placement services of our colleges will be pressed to do a very effective job if some students are to find a job after completing college.

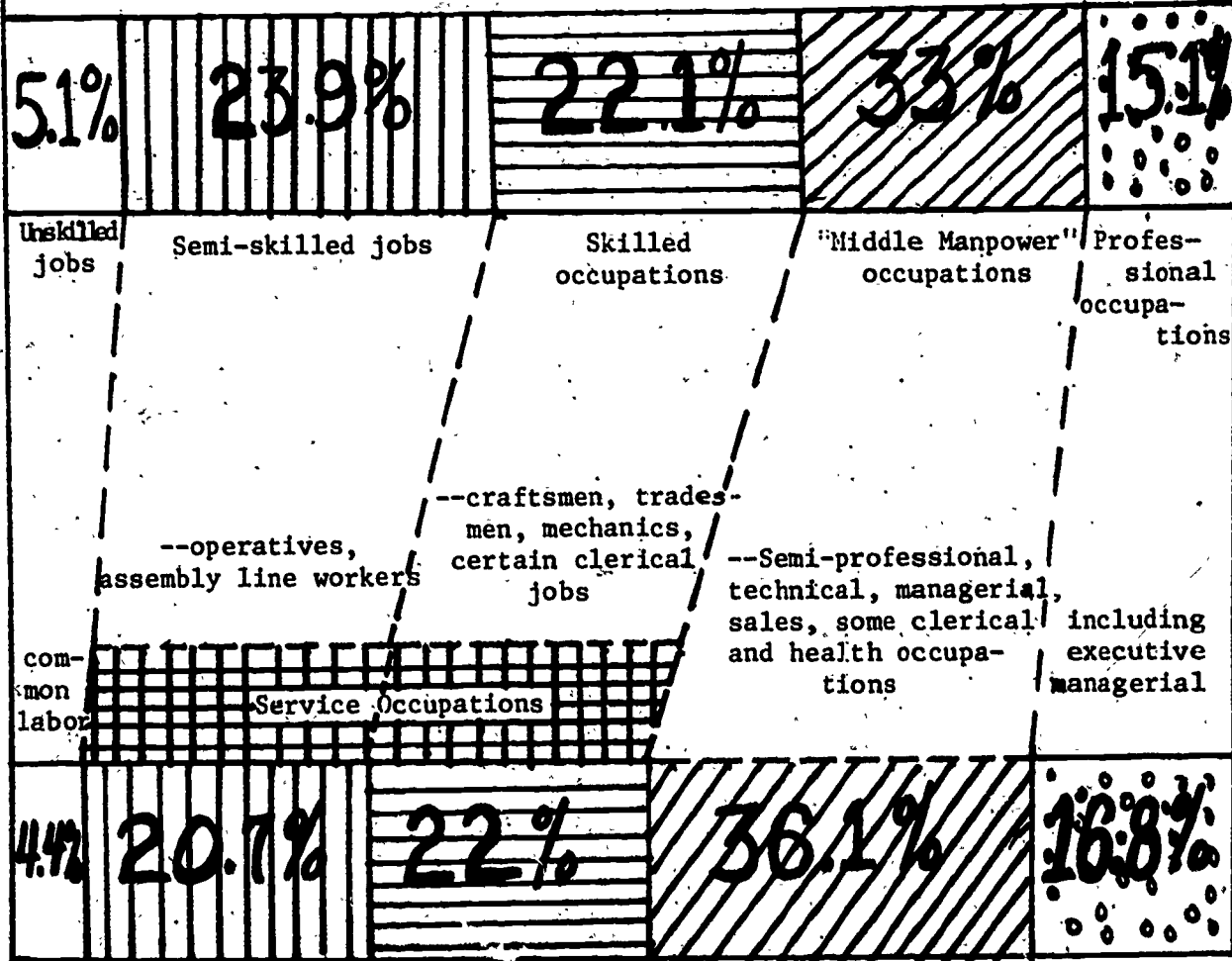
FUTURES MANPOWER STUDY
FOR THE SAN DIEGO COMMUNITY COLLEGES
TASK FORCE II
by
THOMAS GILLETTE
SAN DIEGO STATE UNIVERSITY
May 29, 1975

Most long-term trends in the employment of white-collar, blue-collar, service, and farm workers are predicted to continue through 1985. However,

PRESENT AND FUTURE CHART I
THE U. S. OCCUPATIONAL DISTRIBUTION



-APPROXIMATE 1975 WORK FORCE GROUPINGS-



-ESTIMATED 1985 WORK FORCE GROUPINGS-

Source: Gillette, Thomas L., Special Occupational Distribution Study for Task Force II of the San Diego Community Colleges, San Diego State University, San Diego: May 29, 1975.

some significant changes will occur within each of these broad occupational classifications, according to the Bureau of Labor Statistics projections of the U.S. economy. (3) Technological changes will continue to account for both upward and downward variations by specific occupational groupings. The expansion of computer technology is but one example. Also, differences in industrial growth will boost some occupations (within the health field, for example) while others will experience a relative decrease in rate of growth (the educational field) and still others will decline (mining jobs). Another phenomenon is a potential supply that is greater than potential requirements for college graduates beginning in the late 1970's in jobs traditionally held by these workers.

Total employment is expected to increase about one-fifth between 1975 and 1985, going from almost 86 million to over 101 million based on a count of employed persons.¹ (See Table I). Expected changes for major occupational classifications are shown in Table II.

GROWTH

Professional and Technical This group will experience the greatest growth, from approximately 12.5 million in 1975 to 17 million by 1985.

This is about one and one-half times the annual rate of employment increase projected for all occupations combined (See Table III).

-
1. Statistics on employment are based on the concept used in the Current Population Survey in which each individual is counted once in his major occupation.

As is the case with all major occupational groups, the annual rate of growth is expected to be slower between 1980 and 1985 (2.5%) than from 1975 to 1980 (3.3%) as the slowdown in the rate of growth of the economy continues to be felt.

Growth in demand for goods and services will continue to be a major reason underlying job growth among highly trained workers. As the population continues to concentrate in metropolitan areas, requirements are expected to increase for professional and technical workers in environmental protection, urban renewal, and mass transportation. (ibid.).

Managers and Administrators Employment in this occupational group is projected to reach 10.5 million in 1985, up from an estimated 8.3 million in 1975, representing a substantially higher average annual rate of growth than occurred during the 1960-75 period.

Clerical Workers Employment in clerical jobs is expected to grow faster than total employment, rising to almost 20 million in 1985 from over 14.5 million in 1975. Among the major occupational groups, only professional workers' jobs are expected to grow faster.

Sales Workers Employment is projected to rise about .8 million from 1975 to 1985, but the rate of increase is slower than that expected in total employment. As a result, their share of employment is projected to decrease slightly (0.2%).

Craftsmen and Kindred Workers Employment in these highly skilled blue-collar occupations is expected to rise from just under 11.5 million in 1975 to 13.0 million in 1985, a slower rate of growth than in the preceding decade.

Operatives More blue-collar workers are in this group than in any other group. Employment of operatives is projected to rise from 13.7 million in 1975 to over 15 million in 1985, a much slower rate of increase than

that for total employment. Consequently, the proportion of operatives relative to total employment is expected to decrease about 1% by 1980 and another .5% by 1985.

Nonfarm Laborers Employment requirements for laborers are expected to increase slowly between 1975 and 1985. Any increases in demand for laborers are expected to be offset roughly by rising output per worker resulting from the continuing substitution of machinery for manual labor.

Service Workers These occupations encompass a wide variety of jobs and skills. They include such diverse jobs as FBI agent, beauty operator, and janitor. Their employment is projected to rise from 11.3 million in 1975 to over 13 million in 1985, a somewhat slower rate of growth than that projected for total employment. Employment of private household workers, however, which make up a large part of this major group, is projected to decline from 1.3 million to 1.1 million. If these persons are excluded from the calculations, service workers show a faster rate of growth than total employment.

Concluding Note The projections are based upon the most current and reliable sources identified in the Reference Bibliography. None of these projections are able to accurately and specifically measure the impact of the inflation-recession process, the energy crisis, the meaning of Cambodia and Viet Nam, Watergate, and other idiosyncratic but significant socio-political and socio-economic events. They are the best scientific guesses, however, using the best data available.

TABLE I
EMPLOYMENT AND PERCENT DISTRIBUTION OF EMPLOYMENT
BY MAJOR OCCUPATIONAL GROUP, 1972, AND PROJECTED 1980 and 1985 *

Occupational Group	1972	1980	1985
Total	81,703 (100%)	95,800 (100%)	101,500 (100%)
White-collar Workers	39,092 (47.8%)	49,400 (51.5%)	53,700 (52.9%)
Professional and Technical Workers	11,459 (14%)	15,000 (15.7%)	17,000 (16.8%)
Managers and Administrators	8,032 (9.8%)	10,100 (10.5%)	10,500 (10.3%)
Sales Workers	5,354 (6.6%)	6,300 (6.6%)	6,500 (6.4%)
Clerical Workers	14,247 (17.4%)	17,900 (18.7%)	19,700 (19.4%)
Blue-collar Workers	28,576 (35.0%)	31,700 (33.1%)	32,800 (32.3%)
Craftsmen and Kindred Workers	10,810 (13.2%)	12,200 (12.8%)	13,000 (12.8%)
Operatives	13,549 (16.6%)	15,000 (15.6%)	15,300 (15.1%)
Nonfarm laborers	4,217 (5.2%)	4,500 (4.7%)	4,500 (4.4%)
Service Workers	10,966 (13.4%)	12,700 (13.3%)	13,400 (13.2%)
Private Household Workers	1,437 (1.8%)	1,300 (1.3%)	1,100 (1.1%)
Other Service Workers	9,529 (11.6%)	11,400 (12.0%)	12,300 (12.9%)
Farm Workers	3,069 (3.8%)	2,000 (2.1%)	1,600 (1.6%)

* in thousands

TABLE II

EXPECTED CHANGES IN MAJOR OCCUPATIONAL CLASSIFICATION, 1972-85

Classification	1972		1985		Percent Change 1972-85
	Number of jobs (in millions)	Percent	Number of jobs (in millions)	Percent	
Total Employment	81.7	100.0	101.5	100.0	24
White-collar workers-----	39.1	47.8	53.4	53.0	37
Blue-collar workers-----	28.6	35.0	32.8	32.3	15
Service Workers-----	11.0	13.5	13.3	13.1	24
Farm Workers-----	3.1	3.8	1.6	1.6	-48



TABLE III

- AVERAGE ANNUAL RATE OF EMPLOYMENT CHANGE
BY MAJOR OCCUPATIONAL GROUP, 1972 (ACTUAL) AND 1972-85 (PROJECTED)

Occupational Group	1972-80	1980-85	1972-85
Total-----	2.0	1.2	1.7
White-collar workers-----	3.0	1.7	2.5
Professional and technical workers-----	3.5	2.5	3.1
Managers and Administrators-----	2.8	.8	2.0
Sales Workers-----	2.1	.5	1.5
Clerical Workers-----	2.9	1.9	2.5
Blue-collar Workers-----	1.3	.7	1.1
Craftsmen and Kindred Workers-----	1.6	1.2	1.4
Operatives-----	1.6	.5	1.0
Nonfarm laborers-----	.7	0	.4
Service Workers-----	1.9	1.0	1.6
Private household workers-----	-1.7	-3.4	-2.4
Other Service Workers-----	2.4	1.4	2.0
Farm Workers-----	-5.4	-4.4	-5.0

TABLE IV

THE CHANGING U.S. OCCUPATIONAL DISTRIBUTION

-Approximate 1975 work force groupings and
Estimated 1985 work force groupings-

	<u>1975</u>	<u>1985</u>	
Unskilled jobs	5.1%	4.4%	
Semi-skilled jobs	23.9%	20.7%	
Skilled Occupations	22.1%	22.0%	Service Occupations
"Middle Manpower" occupations	33.8%	36.1%	
Professional Occupations	15.1%	16.8%	

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The present picture of Vocational Education in the San Diego Community Colleges, a Philosophy of Career Education, and the future manpower picture have laid the base for the next chapters. Five general goals drawn from the Philosophy of Career Education, related subgoals and objectives are presented in Chapter IV. The objectives have been designed as management objectives with performance indicators and suggestions, in some cases, on how to come to grips with the problem.

CHAPTER IV GOALS AND OBJECTIVES

The values expressed in the philosophy in Chapter III will be reflected in one of five major goals, or sub-goals related to them, or in the objectives. In each instance the objectives are derived from the goals and sub-goals.

When the goals, sub-goals and objectives listed here have been achieved, we will have arrived into the future which is detailed in part by our choice. A description of some general characteristics of our district-wide organization will further detail the future of our choice. The goals and objectives for educational support services to students will be treated in Chapter III.

GOALS AND OBJECTIVES

Two of the most important questions the master planners who take over this early phase of the planning process will ask is, "When can we start working on bringing these objectives into being? When can we expect these various objectives to be achieved?" A rough estimate on how to answer these questions is presented for the benefit of those who will continue the master planning process.

It is recommended that each objective be treated in two ways. All objectives should be analyzed in the light of the changes they will produce and the treatment needed to deal with the changes. All objectives should also be analyzed as to when the District can expect them to be achieved.

The change analysis may be executed by identifying for each objective four kinds of changes or treatments.

1. Procedural changes - the time period to complete these changes tends to be short.
2. Research and study including resource implications - the time period to treat the objectives in this way may be short or long.

Chapter IV

3. Facility and hardware - the time period to complete these changes is long.
4. Reorganization of the organizational structure and/or management process - the time period tends to be short or medium.

During the study phase, a cost effectiveness analysis of each objective can be made. At this time alternate objectives with reduced resource requirements can be developed, if practicable. These alternates can then be compared to the original objectives and a decision to accept the most beneficial objective made.

The second treatment, when objectives can be expected to be achieved, may be divided into three phases.

Phase I - Complete objectives within one year

Phase II - Complete objectives within three years

Phase III - Complete objectives within ten years.

It is assumed all objectives will be analyzed at about the same starting time.

A preliminary analysis of this second treatment has been made for the following objectives. Each one will be assigned a Phase I, II or III label. Again, it should be remembered this treatment is a "first cut"; it is for the benefit of planners who will use this report as a preliminary planning instrument.

There are five primary goals. An original draft of these goals was made for the first task force meeting. They were revised May 19, 1975.

The objectives will be listed under the major goals to which they are related.

Chapter IV

THE PRIMARY GOALS OF THE TASK FORCE

- I. The San Diego Community College will develop an organizational system which maximizes the delivery of occupational education services to meet the needs of the community within the limitations of available resources.
- II. The San Diego Community Colleges, in harmony with other county educational institutions, will seek out the most effective ways, consistent with the needs of the community, to provide career education services to the community. The major needs of today's community are qualified manpower and economic self sufficiency on the part of its members.
- III. The organizational system of the San Diego Community Colleges will operate in ways which maximize occupational education program and cost effectiveness.
- IV. The San Diego Community College District will provide educational support services for students and prospective students in ways which will help them make appropriate educational and retraining choices in order to meet their own particular needs.
- V. The San Diego Community Colleges will develop and use a Futuristics Team to study, predict, and distribute information about alternate futures, and to act as a service agent to organizational elements in the District.

GOAL I

THE ORGANIZATION OF CAREER EDUCATION

A philosophy so fundamental and all encompassing as Career Education requires consideration from an organizational point of view. The fundamental question is, "How can the building blocks of organizational structure be joined in a way which optimizes the outcomes of career education?"

If career education prepares people on the one hand to enter semi-skilled and skilled occupations, and on the other to enter highly complex professions such as brain surgeon or civil engineer, it implies a unity of educational services. This unity can be expressed in the community colleges by applying a philosophy of career education to the Arts and Science instructional area and counseling area as well as the Vocational Education area.

Community advisory committees, career guidance, and preparing students to enter successfully occupational roles applies as much to Arts and Science majors as to Vocational Education majors. Career guidance should become the fundamental mission of the counseling organizations. In one case the student leaves college and enters an occupation straight from our community colleges. In the other, there is an intervening period of time for further preparation, usually, at the four year college or professional school, or both before job entry.

If we need a unity of educational service, the most effective way to produce that service is to design an organizational structure which maximizes the opportunities to unify.

There are two key management positions which have the potential to maximize the quality of career education services. At the District level, the position is the Assistant Chancellor for Instructional and Student Service. At the campus it is the Vice President of the college.

The Assistant Chancellor can coordinate at the District level to unify Manpower and Vocational Education Services, Student Services, and other instructional services including Arts and Sciences. He can administrate so that all three divisions of District service are going in the same direction, working to achieve integrated management objectives.

Chapter IV

At the college level, it is the position of Vice President which can be assigned the integrative powers to insure that the areas of Vocational Education, Arts and Sciences or Instruction, and Student Services, particularly counseling, are all going in the same direction. He is the only person under the present functional organization who can be assigned the time and the authority to achieve the integrated management objectives of career education. On small campuses, the Director or President would assume this role. On a large campus he does not have adequate time to devote to this activity.

At the District level, increased resources would be needed to support expanded career center and student service on campus before or about the time of registration. Expanded support would also be required of Futuristics services; grants and funding services, and learning center services. At the campus level, the Deans of Vocational Education, Student Services, and Arts and Sciences or Instruction would come under the administrative direction of the Vice President.

The Vice President on campus would also be the logical manager to produce a high quality of curriculum development and instruction. The Assistant Chancellor would be responsible for unifying these activities between campuses. The San Diego City Schools are well into the implementation of their Career Education effort. It is in part a curriculum development effort. Appendix D describes their philosophy of Career Education and a proposed functional organizational chart.

The following management objectives attempt to translate many of the needs of the District into an operational structure with which the colleges and District staff can come to grips.

Chapter IV

GOAL

The San Diego Community Colleges will develop an organizational system which maximizes the delivery of occupational education services to meet the needs of the community within the limitations of available resources.

1. OBJECTIVE :

Establish an organization which produces a delivery system of college services to the student when the person needs a particular service.

PERFORMANCE INDICATOR - A planning group will determine the various organizational outputs different parts of the delivery system organization produce. These will be the criteria of performance. The degree of variance between these criteria and the actual outputs of the units will be the performance indicators.

SUGGESTIONS

There are at least three major purposes of the organization.

- a. It must be cost effective and program effective.
- b. The organization will "pick up" the community member when he becomes interested in admissions and support him through the registration and educational process to job placement after program completion:
- c. The organization will prepare those students so committed for a smoothly planned transfer to a four year college.
- d. A major characteristic of the organization is that it will integrate into unified operating outputs or results information and services which have "homes" or proprietary activities in the areas of instruction and student services.

Chapter IV

(Both of these activity areas come within P. F. Drucker's contribution analysis category of result producing activities. page 532.)

OBJECTIVE TREATMENT - PHASE II

2. OBJECTIVE

Determine the "Key Activities" in the vocational education area and in the educational support area. (Definition of Key activities: the load bearing parts of the organizational structure. P. F. Drucker, page 530.)

PERFORMANCE INDICATOR - A management analysis group will determine the Key Activities. Campus and center administrators and management consultants will verify the validity of the Key Activities.

OBJECTIVE TREATMENT - PHASE I

3. OBJECTIVE

Conduct an analysis of symptoms of malorganization in the vocational education and student services area on a recurring basis. (P.F. Drucker, page 546)

PERFORMANCE INDICATOR

A management analysis group will determine the symptoms of malorganization through analysis. Campus and center administrators and management consultants will verify the validity of the symptoms.

OBJECTIVE TREATMENT - PHASE I

4. OBJECTIVE

Develop the requirements for, and the implementation strategy of a innovations management effort. (P.F. Drucker, Page 786).

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PERFORMANCE INDICATOR - A management analysis group will determine the requirements and strategy of a management innovations effort. Campus and center administrators and management consultants will verify the validity of the requirements and implementation criteria.

OBJECTIVE TREATMENT - PHASE I5. OBJECTIVE

Develop criteria for the site selection of occupational education programs.

PERFORMANCE INDICATORS - A management analysis team will determine the criteria. District, campus, and center administrators and management consultants will verify the validity of the criteria for site selection.

SUGGESTIONS

- a. Develop career clusters for occupational programs as a planning tool for site selection.
- b. Identify levels of instructional complexity.
- c. Allocate programs to sites on the basis of instructional complexity.
 1. Programs with the highest level of instructional complexity will be located on the college campuses. These programs will require greater quantitative and verbal academic skills. More theory courses will be taught.
 2. Programs with hands on skills and moderate instructional complexity may be taught in the Skill Center, ECC, and Adult Centers. Modest quantitative and verbal skills are required of students if they are to be successful. The ECC may prepare students in the first year of their college programs.

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3. Job upgrading programs will be located in the community. The level of complexity will vary with the skills and knowledges being taught.
4. Retraining programs tend to require moderate academic skills and will be located in the Skill Centers, Adult Centers and E.C.C.

This objective will be treated in full detail later in the report.

OBJECTIVE TREATMENT - PHASE I

6. OBJECTIVE

Develop a unitary instructional - curriculum development organizational structure.

PERFORMANCE INDICATOR - A management analysis group will determine the organizational structure. District, campus, and center administrators, including all chief site administrators and faculty will validate the organizational structure.

OBJECTIVE TREATMENT - PHASE I

7. OBJECTIVE

Develop a futuristics organization with elements at both district and site levels.

PERFORMANCE INDICATOR - A management analysis group will determine the organizational structure in cooperation with faculty and administrators. District, campus, and center administrators, and faculty will validate the organizational structure.

OBJECTIVE TREATMENT - PHASE II

8. OBJECTIVE

House student support services in facility layouts and locations that are compatible with District philosophy and resources.

Chapter IV

PERFORMANCE INDICATOR - Facility plans will be validated by site administrators, faculty, classified, and students, and by consultants.

OBJECTIVE TREATMENT - PHASE II

COMMUNICATIONSSUB-GOAL

It is necessary to establish an effective communication system, both internal and external, supported by adequate resource allocation.

9. OBJECTIVE

Develop a management communications system which signals managers at all levels from whom they receive and to whom they send.

PERFORMANCE INDICATOR - A management communications analysis group will design a communications system. District, campus, and center administrators, faculty, classified, students and consultants will validate the system.

SUGGESTION

- a. The communications system will use flow chart schematics to build communication networks for each administrative position.
- b. The system will include a feedback indicator so that each administrator knows how effectively he is communicating.

OBJECTIVE TREATMENT - PHASE II10. OBJECTIVE

Establish a continuing staff and public understanding program on "what really is career education."

PERFORMANCE INDICATOR - A District Planning Group including the Communications Services will develop a plan to achieve this objective. The plan will be validated by the Chancellor and his delegates. (recommend students, faculty, administrators - instructional and student services, and members of community)

The comparison between the actual results of the program and the plan will signal the degree of performance.

SUGGESTION

- a. Allocate adequate budget for an effective publicity program.
- b. Publicity will be given to the occupational programs, on college campuses, adult centers, high schools, and in the community. Publicity for programs will include job placement probability and the qualifications for entry into the program.

OBJECTIVE TREATMENT - PHASE IIARTICULATION11. OBJECTIVE

Maintain a close, continuous working relationship between the community and both student and instructional services to promote prompt recognition and response to changing occupational education needs.

PERFORMANCE INDICATOR - A management analysis team in cooperation with student services and instructional administrators will develop a community articulation plan for the changing occupational education needs. The plan will list required results and outcomes of this articulation effort by District units. The plan will be validated by the Chancellor and his delegates. The degree to which the respective units achieve results will be the performance indicator.

SUGGESTIONS

- a. Maintain continuing contact with state and area planning organizations.
 1. Employment Development Department
 2. All major businesses and industries.
 3. Industrial Council

OBJECTIVE TREATMENT - PHASE I

Chapter IV

12. OBJECTIVE

Involve counselors, career center staff and students in career guidance and articulation tasks in local high schools and community outreach efforts.

PERFORMANCE INDICATOR - A student services planning team involving site and District administrators, counselors, and students will develop a plan for this kind of articulation with criteria for achieving the objective. The degree to which the involved faculty and staff meet the criteria is an indication of their performance.

OBJECTIVE TREATMENT - PHASE I13. OBJECTIVE

Develop and implement an outreach plan which will encourage minority, disabled, rehabilitation clients, and economically disadvantaged students to enroll in occupational education programs.

PERFORMANCE INDICATOR - A vocational education - student services planning team will develop a plan and implementing strategy for this kind of articulation. The Chancellor and his delegates will validate the plan.

OBJECTIVE TREATMENT - PHASE II

Chapter IV

PERSONNELSUB-GOAL

Personnel who staff the Career Education effort shall be selected and trained through staff development to provide the highest level of competencies required to meet the objectives of their respective organizational structures. A system of accountability built around realistic performance standards and evaluation criteria will be effectively administered.

14. OBJECTIVE

Select highly qualified job and industry experienced people for occupational instruction positions.

PERFORMANCE INDICATOR - Personnel search and selection criteria will be prepared by a personnel-vocational education planning group.

There are two performance indicators related to these criteria:

- a. The actual selection of personnel matches to the maximum degree possible the selection criteria.
- b. The personnel selected perform as expected.

SUGGESTIONS

- a. The greatest selection weight will be given for qualification in the subject matter and teaching proficiency!
- b. Candidates for occupational programs from the local community will be given light additional weight because they know the area.

OBJECTIVE INDICATOR: PHASE II15. OBJECTIVE

Select highly qualified instructors, curriculum consultants, and industry or business resource people for curriculum development.

PERFORMANCE INDICATORS - a. the degree to which the actual selection of personnel matches to the maximum degree possible the selection criteria. b. the degree to which the personnel selected perform as expected.

Chapter IV

OBJECTIVE INDICATOR: PHASE II16. OBJECTIVE

Select supervisory and administrative personnel for occupational education on the basis of criteria which include expertise in the specialty field and expertise in management.

PERFORMANCE INDICATOR - Personnel search and selection criteria will be prepared by top management. The performance indicators are:

- a. The degree to which the actual selection of personnel matches to the maximum the selection criteria.
- b. The degree to which the personnel selected perform as expected.

SUGGESTIONS

Minimize the element of "convenience" in assignment of administrative personnel. Maximize the element of qualifications and growth potential for the position and higher positions. Promote from within if practicable.

OBJECTIVE TREATMENT PHASE I17. OBJECTIVE

Representatives from the community who are occupational specialists shall be selected to serve on the personnel selection committees of faculty being selected in the same specialty:

PERFORMANCE INDICATOR - Develop selection criteria for occupational specialists to serve on personnel committees. The performance indicators are:

- a. the degree to which the actual selection of personnel matches to the maximum the selection criteria.
- b. the degree to which the personnel selected perform as expected.

OBJECTIVE TREATMENT PHASE II

Chapter IV

18. OBJECTIVE

All faculty and student services staff positions will be nationally solicited.

PERFORMANCE INDICATOR - Develop criteria for achievement of a national search plan. The extent to which the personnel staff follows this search plan will be the performance indicator.

OBJECTIVE TREATMENT PHASE I19. OBJECTIVE

Position descriptions will describe the objectives to be achieved in that position and performance indicators related to each objective. The objectives will be reviewed and updated regularly.

PERFORMANCE INDICATOR - Develop criteria for an effective position description. Develop a review time schedule. The degree to which the position descriptions meet their criteria, and the timeliness with which staff review and update their position descriptions compared to the time schedule are the performance indicators.

SUGGESTION

- a. A communication network will be a part of each position description showing what information, from whom and to whom.
- b. Corrective feedback from the periodic reviews of position descriptions will go into the management information system.

OBJECTIVE TREATMENT PHASE II20. OBJECTIVE

Select highly qualified staff for the various student services positions. (Career center coordinators, counselors, Deans of Students, registration managers, work experience coordinators, and placement officers).

Chapter IV

PERFORMANCE INDICATOR - Student Services administrators and staff will develop selection criteria for the various positions in this area. There are two performance indicators:

- a. The actual selection of personnel matches to the maximum degree possible the selection criteria.
- b. The personnel selected perform as expected.

SUGGESTIONS

- a.. The greatest weight will be assigned to qualifications in the specialty and potential growth in the position.
- b. Heavy weight will be assigned to the potential development of the individual in the career ladder.
- c. Candidates will give evidence of seeking formal training for changing roles.

OBJECTIVE TREATMENT PHASE I

Chapter IV

STAFF DEVELOPMENT

SUB- GOAL

Staff development will give faculty and staff the opportunities to increase their effectiveness in their own positions and to prepare themselves for greater responsibility along their particular career ladder.

21. OBJECTIVES

Occupational program faculty will obtain appropriate work experience at regular intervals in order to maintain technical proficiency in their instructional area.

PERFORMANCE INDICATOR - A vocational education planning committee with technical specialty community representation will determine the time sequence between work periods for faculty and the nature of that work experience.

The performance indicator will be the degree to which faculty can conform to this set of staff development criteria.

SUGGESTION

Instructors will be assigned a work period of about 90 days.

Instructors will receive their regular pay when on a work experience assignment.

OBJECTIVE TREATMENT - PHASE II22. OBJECTIVE

Provide funds for faculty travel to attend seminars and conferences.

PERFORMANCE INDICATOR - to be developed by a planning group comprised of the senior instructional administrator on campus and at the District.

OBJECTIVE TREATMENT - PHASE I

Chapter. IV

23. OBJECTIVE

Conduct seminars which teach faculty to use the most effective instructional principles, technologies, and curriculum design principles.

PERFORMANCE INDICATOR - Performance criteria will be developed for each seminar which require faculty to use effectively the principles they learn. The length and scope of the seminars will be adjusted to the effort required to teach terminal performance.

The performance indicator is the degree to which each faculty trainee is able to approach the level of performance required in the seminar outcomes.

OBJECTIVE TREATMENT - PHASE I24. OBJECTIVE

Conduct seminars which teach student services counselors and staff the most effective principles, techniques and operations related to their respective specialties.

PERFORMANCE INDICATOR - the performance indicator is the degree to which each faculty trainee is able to approach the level of performance required in the seminar outcomes.

SUGGESTION

Seminars for counselors will include:

- a. Career guidance practices.
- b. Test theory, administration, and interpretation.
- c. Occupational information.
- d. Career choice theory.
- e. Career development theory.

OBJECTIVE TREATMENT - PHASE I

25. OBJECTIVE

Develop and implement a plan to help occupational instructors upgrade themselves in their academic education when needed.

PERFORMANCE INDICATOR - The degree to which actual practice will approximate the procedures developed in the plan.

OBJECTIVE TREATMENT - PHASE I26. OBJECTIVE

Promote employees from within the San Diego Community College District whenever practicable.

PERFORMANCE INDICATOR - Top management will develop a plan for promotion from within. The performance indicator is the degree to which the promotion pattern within the district conforms to the promotion plan.

OBJECTIVE

27. Produce greater social integration in the district by reducing the social and value distance between district personnel, faculty, and classified staff. Help all district personnel understand the viewpoint of other groups as a way to assist productive change.

PERFORMANCE INDICATOR - Top management will create a task force to develop a plan with objectives to be achieved. The degree to which the objectives in the plan are achieved once the process of reducing distance is in operation will be an indicator of performance.

OBJECTIVE TREATMENT - PHASE II

Chapter IV

AN ORGANIZATION FOR EVALUATION SERVICES

Evaluation, when viewed in an operational context, is one of those activities which most administrators endorse heartily, then never get around to doing. Faculty do evaluate, but usually on a very shallow basis. Counselors rarely use correctly, if at all, the evaluation instruments available to them.

Critics of education in the community and within the family of education rail at educators about weakness in this area. It has made good copy in the press, in educational journals and in graduate schools of education. But everybody ignores the main reason for this weakness. It should be very apparent. In the priority of tasks with which administrators, teachers, and counselor struggle each working day, evaluation is so far down the list that it rarely gets picked up, and if it does, not enough time is allocated usually to do the job properly.

What people must realize is that good evaluation takes careful planning, purposeful preparation and execution which all take considerable time and careful--often time consuming interpretation of results.

This is where an evaluation service organization "comes in." It should be a comprehensively organized service with its "head" in the district structure and its arms into every campus and major district unit.

The purpose of the evaluation service is to help users solve in effective ways their evaluation needs. Rather than expecting a busy teacher, administrator, or counselor to work out a complex evaluation problem, the line staff should ask the specialist for assistance. The evaluation service should include the following functions:

1. Develop evaluation designs for line staff.
2. Teach line staff how to evaluate more effectively including the interpretation of data.
3. Provide the latest information in the area of evaluation to staff.
4. Give line staff logistics support in conducting evaluations to the optimum extent which is basically a cost effectiveness question.
5. Develop and maintain a communications network which transmits and receives messages related to evaluation between all designated stations.

One major function of the network is to help managers make decisions by insuring they receive adequate evaluation information.

The "head" of the evaluation service should be located in the Planning and Evaluation Division of the District office. The "head" can specialize in developing and maintaining a high quality of service.

The "legs" of the organization should specialize in serving customers. A specialist/s should be located on each campus who can assist and perform services for the many line staff who need it. The campus evaluation personnel should be assigned to the support staff of the Vice President. This is essential so that they may serve any area without proprietary interference from the area in which they are housed. These specialists should also become proficient in evaluating program and cost effectiveness.

The campus evaluation staff will take their operating instructions from the Vice President, though they will have a professional responsibility to cooperate closely with the District Evaluation group and follow District Evaluation policy. The quality of the service will be emphasized in District policy.

Any direct technical instructions and requirements for evaluation will be transmitted by District Policy or by instructions from the Chancellor to the President of the campus. An additional resource allocation is required to operate this organization. Resources may be reallocated from reducing instructional costs while improving program effectiveness.

The following objectives give direction and a body of work to an evaluation organization.

Chapter IV

EVALUATION

SUB- GOAL

Support the various organizational units of the District to evaluate themselves. Evaluation information will show the degree of effectiveness with which the District is approaching fulfillment of its various goals and objectives. This information will be arranged in such a way that it can be used as constructive remedial feedback into the various operations which together produce educational outcomes.

28. OBJECTIVE

Develop an Evaluation Services organization.

PERFORMANCE INDICATOR - The top administrators and their delegates will develop an organizational structure and implementation strategy for evaluation services. Performance indicators need to be developed for the objectives established for the Evaluation Services Organizations.

SUGGESTIONS

Design evaluation strategies and instruments for each organizational function in the college and in the district in cooperation with the respective faculty and managers. The design will include: who will evaluate, how will the evaluation be conducted, what will the evaluation output consist of, how will the output be used? Limitations of the evaluation information will be stated.

OBJECTIVE TREATMENT - PHASE II

29. Develop and implement a plan for evaluating the effectiveness of instruction.

PERFORMANCE INDICATOR - Compare the actual results of evaluation of instruction with the evaluation criteria in the plan.

Chapter IV

SUGGESTIONS

Instruction may be evaluated by:

- a. Evaluation reports from advisory committees.
- b. Reports from employers.
- c. Self reports from former students on the job.
- d. Performance and achievement tests at time student completes his curriculum and leaves college.
- e. Job analysis by District specialist of student's job performance after he graduates and is placed on a job at intervals of 6 months, 2 years, 5 years after program completion.
- f. Computer mailers.
- g. State and national standardized performance examinations.
- h. Evaluation of programs and courses against state and national profiles.

30. OBJECTIVE

Develop and implement a plan for evaluating the effectiveness of management.

PERFORMANCE INDICATOR - Compare the actual results of evaluation of management with the evaluation criteria in the plan.

OBJECTIVE TREATMENT - PHASE II

31. The evaluation organization will assist and verify the position of organizational units in approaching their respective goals and objectives.

PERFORMANCE INDICATOR - Develop a plan for assisting organization units. Compare the assisting work done by the evaluation staff with the criteria established in the plan.

OBJECTIVE TREATMENT - PHASE II

Chapter IV

32. Design and conduct needs assessment for various elements and for various purposes within the district.

PERFORMANCE INDICATOR - Compare the actual needs assessment results with the criteria established for effective needs assessment.

OBJECTIVE TREATMENT - PHASE I (IN PROGRESS)

33. OBJECTIVE

Experts or consultants should be brought in periodically to help in evaluation and constructive feedback strategies.

PERFORMANCE INDICATOR - The degree to which the consultant can improve the evaluation process or validate its high level of effectiveness.

OBJECTIVE TREATMENT - PHASE I

34. OBJECTIVE

Develop and implement an information distribution plan and/or communication network for each element of evaluation.

PERFORMANCE INDICATOR - Compare the actual evaluation information distribution with criteria developed by the plan for communication.

OBJECTIVE TREATMENT - PHASE II

35. OBJECTIVE

Evaluate the effectiveness of advisory committees.

PERFORMANCE INDICATOR - Compare the actual work of evaluating advisory committees for effectiveness with the criteria developed for evaluating them. The indicator is the degree of congruence.

OBJECTIVE TREATMENT - PHASE I

GOAL II
INSTRUCTION

GOAL - The San Diego Community Colleges, in harmony with other county educational institutions, will seek out the most effective ways consistent with the needs of the community to provide career education services to the community. The major needs of today's community are qualified manpower and economic self sufficiency on the part of its members.

SUB-GOAL - The community colleges will teach individuals the skills and knowledges essential to self fulfillment and survival in our complex society. Career education is for those people who wish to upgrade themselves in an occupation, prepare to enter a new technical, trade, service or business occupation or transfer to a more advanced career program.

OBJECTIVES

1. OBJECTIVE

Prepare every student who completes an occupational program with the qualifications needed to enter a job and perform the job requirements in the specialty.

PERFORMANCE INDICATOR - Obtain feedback from former students and their employers that the former students have met the objective in 90 percent of the cases.

OBJECTIVE TREATMENT - PHASE II

2. Offer occupational courses in an environment as close to the actual work situation as possible geographically, environmentally, and in terms of equipment.

PERFORMANCE INDICATOR - To be developed by vocational education specialists:

SUGGESTION

Some occupational programs may be offered at the work site of industries in cooperation with prospective employers of the occupational group.

OBJECTIVE TREATMENT - PHASE II

3. OBJECTIVE

Conduct job analysis of jobs for which the San Diego Community Colleges is preparing students. Use the job analysis findings in occupational curriculums to insure that students are qualified for job entry when they complete their educational programs.

PERFORMANCE INDICATOR - To be developed by job analysis specialists, vocational education curriculum writers and instructional administrators.

SUGGESTION

Develop job analysis information that can be used to:

- a. Teach work knowledges
- b. Teach work skills
- c. Teach problem solving and analytical skills
- d. Teach social skills and attitudes related to job retention
- e. Construct and teach a realistic occupational role concept of the typical worker in the specialty.

OBJECTIVE TREATMENT - PHASE II

4. OBJECTIVE

Translate the findings of the job analysis effort in objective three into a realistic occupational role concept of the typical worker in the specialty.

PERFORMANCE INDICATOR - To be developed by job analysis specialists.

Chapter IV

SUGGESTION

Use the occupational role concept in two ways:

- a. Teach students as part of an occupational curriculum the role concept.
- b. Use the various occupational role concepts in career counseling as an exploration resource.

Prepare an occupational role concept description for each occupational program.

OBJECTIVE TREATMENT - PHASE II5. OBJECTIVE

Identify through job analysis those skills, knowledges, attitudes and social skills which identify high quality performance in the various occupations and teach them to all students in the respective programs:

PERFORMANCE INDICATOR - Obtain feedback from former students and their employers that students have been taught these critical elements and can practice them within the limits of their ability. Employers and instructional specialists will establish the specific standards of performance.

SUGGESTION

Develop curriculum performance objectives for these critical elements.

OBJECTIVE TREATMENT - PHASE II6. OBJECTIVE

Cross train male and female job roles to meet job demands, particularly, job demands required by legislative direction.

Chapter IV

Performance Indicator - The job supply of "other sex" workers comes into balance with the job demand for "other sex" workers in the various jobs. Vocational education specialists will determine the specific criteria for achieving satisfactory performance.

SUGGESTION: - The identification of "other sex" job demands will be carefully detailed.

OBJECTIVE TREATMENT - PHASE I

7. OBJECTIVE

Teach problem solving skills in each occupational curriculum which are used in the occupation itself.

PERFORMANCE INDICATOR - The students will perform the problem solving skills required for their respective occupation before graduation. Vocational education specialists will determine the specific criteria for achieving satisfactory performance.

OBJECTIVE TREATMENT - PHASE II

8. OBJECTIVE

Use instructional principles and technology methods which maximize student learning in the classroom whenever such practices are program and cost effective.

PERFORMANCE INDICATOR - The principles and methods used by teachers for instruction will be compared with the accepted principles and methods. Instructional specialists and faculty will determine the specific criteria for achieving satisfactory performance.

OBJECTIVE TREATMENT - PHASE II

Chapter IV

9. OBJECTIVE

Develop subject matter for occupational programs which will be used to teach the student how to build a realistic self concept related to his anticipated world of work.

PERFORMANCE INDICATOR - The students will perform in ways that show each one is realistically oriented in terms of his/her self concept to his/her anticipated world of work. Educational psychologists, faculty and administrators will determine the specific performance criteria that show satisfactory performance.

SUGGESTION

Coordinate the career center and placement resources with the instructional program to help the student develop a realistic self concept related to his anticipated world of work.

OBJECTIVE TREATMENT - PHASE II10. OBJECTIVE

Develop and implement core courses with subject matter content which cover the widest areas of occupational role elements.

PERFORMANCE INDICATOR - The establishment of core courses will indicate achievement of the objective. Vocational education specialists will determine the criteria for the optimum widest job elements in the curriculum.

OBJECTIVE TREATMENT - PHASE II11. OBJECTIVE

Include in the maximum number of programs the following characteristics:

- a. Lateral movement from one occupational or transfer program to another with a minimum loss of time for the student.
- b. Be 90 percent successful in their academic performance in occupational courses.

Chapter IV

- c. Be able to earn certificates or degrees or follow valid transfer plans to other college programs.
- d. Enter or exit at times and in ways which meet students' individual needs.

PERFORMANCE INDICATOR - Show evidence that these characteristics have been incorporated into specific programs determined by vocational education specialists and administrators as the criterion.

OBJECTIVE TREATMENT - PHASE II

12. OBJECTIVE

Maintain the occupational programs in balance with the manpower needs of the community.

PERFORMANCE INDICATOR - Vocational education administrators will establish the criteria of proper balance which can then be compared with the job supply and demand characteristics of the respective occupational programs.

SUGGESTION

- a. The vocational education administrators will start or expand courses with high manpower needs on the one hand and curtail or cancel courses with low job demands and poor placement prospects on the other.
- b. The vocational education administrators will use the resources of the District Advisory Committees, Day and Evening College faculty, Adult Education Center administrators and faculty, the Educational Cultural Complex administrators and faculty, Skills Center administrators and faculty, the proposed Futures Team, and District administrators to work out strategies for expanding and closing programs or courses.

Chapter IV

13. OBJECTIVE

Use standard and comprehensive criteria for selecting, modifying, implementing, and closing occupational programs.

PERFORMANCE INDICATOR - District vocational education administrators will develop the criteria for selecting, modifying, implementing, and closing occupational programs.

The performance indicator is the degree of variance between the standard criteria and the actual criteria the responsible administrator uses in selecting, modifying, implementing, or closing the programs.

SUGGESTION

The following are suggested criteria:

- a. Program change will be based in part on cost effectiveness analysis.
- b. The need assessment for occupational programs will include the following determinants.
 - (1) Demand by prospective students for a particular course or program.
 - (2) Demand by the employing community as it reacts to new technologies and needs.
- c. The analysis of the District to start new programs will include:
 - (1) An assessment of the District's capability to conduct such a program.
 - (a) The physical specifications of the facilities required
 - (b) The location of the facilities in relation to employer and student need.
 - (c) The availability of instructional resources.
 - (2) The District's success in curriculum development in cooperation with employee and employer representatives in the occupational area.

Chapter IV

- (3) The acceptability to the District of the resources (budget) demands for the program.
 - (4) The establishment of a high enough priority for the program so that it can qualify for funding and implementation.
 - (5) A heavy weight assigned to the maximum number of job opportunities for program graduates.
 - (6) A heavy weight assigned to low and moderate budget requirements for programs.
- d. Negative criteria for the disestablishment of programs will include:
- (1) Programs with poor job opportunities for graduates
 - (2) Expensive programs that drain funds away from and reduce development of other programs.

OBJECTIVE TREATMENT - PHASE I14. OBJECTIVE

Use methods that will enable vocational education administrators to respond rapidly to community needs in starting occupational programs.

PERFORMANCE INDICATOR - Compare the time it takes to start occupational programs after need assessment with the time criteria established by vocational education administrators and their resource specialists.

OBJECTIVE TREATMENT - PHASE I15. OBJECTIVE

Schedule adequate planning time for each new course before it is implemented.

PERFORMANCE INDICATOR - Compare actual planning time to implement a course with scheduled planning time. The determined variance between actual and scheduled planning time will become the criteria for achieving the objective.

Chapter IV

Vocational administrators and their resource groups will determine the criteria (degree) which is the spread between scheduled and actual planning time.

OBJECTIVE TREATMENT - PHASE I

16. OBJECTIVE

Develop and implement open entry-open exit procedures for some courses in ways that meet student and employer needs.

PERFORMANCE INDICATOR - Criteria which will determine the characteristics of open entry-open exit courses will be established by student personnel and instructional administrators. When courses organized to meet these criteria are implemented, they can be compared to the criteria. The indicator of achieving the objective is the degree to which the course conforms to the criteria. The administrative specialists will set the standards of the degree of acceptability.

OBJECTIVE TREATMENT - PHASE I

17. OBJECTIVE

Increase sharply the number of job upgrading and retraining programs which update the knowledges and skills of community members now in the work force.

PERFORMANCE INDICATOR - Criteria which specify satisfactory variety, number and kinds of retraining programs will be developed by vocational education administrators (Vocational Education and Manpower Development Division) and their resource groups.

The performance indicator is the variance between the actual job upgrading programs implemented and the criteria worked out for "satisfactory" job upgrading programs.

Chapter IV

The criteria determining group will assign values of acceptability (achieving the objective) to the different degrees of variance.

18. OBJECTIVE

Use a plan for collecting information from selected sources for the review, modification, and creation of occupational programs.

PERFORMANCE INDICATOR - A plan will be developed by vocational education administrators and their resource groups for identifying information sources and collecting specific kinds of information.

The performance indicator is how accurately the staff follows the plan in the review, modification and creation of occupational programs. The vocational education administrators will assign values of acceptability to the various degrees of accuracy with which the plan is followed.

SUGGESTION

Sources used in the plan for the collection of information will include:

- a. Advisory committees
- b. Students with six months to two years employment in the field.
- c. A budget review committee
- d. Faculty teaching in the program
- e. Dean of Occupational (Vocational) Education
- f. Responsible District Coordinator
- g. Campus vocational curriculum committee
- h. Senior responsible site and District administrators

OBJECTIVE TREATMENT - PHASE I19. OBJECTIVE

Include student input in the planning process of new occupational programs.

Chapter IV

PERFORMANCE INDICATOR - A plan to use student input into the planning process of new programs will be developed by vocational education administrators.

The performance indicator is the degree of congruence between the plan and the way the responsible new program planner uses student input.

OBJECTIVE TREATMENT - PHASE I

20. OBJECTIVE

Use resources for individualized instruction in occupational programs whenever the resources are both program and cost effective, and can merit a high enough priority to be funded.

PERFORMANCE INDICATOR - District and campus vocational education administrators and curriculum specialists will determine resource use strategy and develop standards of frequency of use of these resources in occupational programs.

The performance indicator is the degree to which resources for individualized instruction are actually used compared to the criteria for successful use.

OBJECTIVE TREATMENT - PHASE II

21. OBJECTIVE

Assign an advisory committee to each occupational program and to each regional occupational program.

PERFORMANCE INDICATOR - This objective will have been achieved when all occupational programs have advisory committees.

22. OBJECTIVE

Staff advisory committees in accordance with a staffing plan.

PERFORMANCE INDICATOR - The variance between the staffing plan and the actual staff composition of an advisory committee will indicate the degree to which this objective has been achieved.

SUGGESTIONS

- a. Advisory committees will include the following staffing inputs:
 1. Occupational specialists, only one representative per company
 2. Counselors
 3. Instructors
 4. Students
- b. The advisory committee will be constituted as to best represent the total community in an occupational area. Employers will be represented.
- c. One advisory committee may advise on more than one program.
- d. The chairman of the advisory committee will be the District coordinator of the program.

23. OBJECTIVE

Create emphasis in instruction on student behaviors needed at the end of the instructional program.

PERFORMANCE INDICATOR - Teachers will compare student performance at the end of their programs with the instructional outcomes constructed in terms of student behaviors. The performance indicator is the variance between the instructional outcomes and student behaviors.

Chapter IV

24. OBJECTIVE

Treat occupational program students with language comprehension deficiencies in ways that permit them to understand the subject matter taught in the program.

PERFORMANCE INDICATOR - Design a plan with one or more options to achieve the objective. The successful completion of students who are selected for entry into the program with language comprehension deficiencies will be the indicator for achieving this objective. The plan will indicate the value assigned the criteria which is the proportion of students with language deficiencies completing the program compared to all students completing it.

SUGGESTION

1. Tutor students intensively when they go through the program.
Keep class size small.
2. After selection, but before regular classes start, require students to complete an intensive language comprehension program designed specifically for the program.

SURVIVAL EDUCATIONSUB-GOAL:

Students will be trained to perform those tasks which are essential to efficiently dealing with the routine tasks in our society. This competency frees the individual to focus on more self fulfilling activities.

The following statement taken from the Journal of Adult and Continuing Education Today, Vol. V, No. 7, March 31, 1975 presents dramatically the deficiencies of many citizens in performing the routine tasks of living in the United States today.

It is obvious that today's curriculum suffers from cultural lag. It was built to meet the needs of a generation which entered a much simpler society after completing high school and college.

A FRIGHTENING LIST OF WHAT ADULTS DON'T KNOW

In writing a headline for the second installment on the Adult Performance Level Study described in the last issue, we started to use the word "shocking" where "frightening" appears in the headline. But we decided that adult educators aren't shocked by these facts, or even shocked by the fact that a good many educators and politicians prefer to look the other way when evidence of the needs of spending more public funds for adult learning is presented. Here, for you to read and weep, is the second and final installment of the interim report.

Selected Survey Results — Analysis of the survey data has only just begun, and a complete report is still several months away. However, the following is a summary of results for a portion of the items dealing with the general knowledge areas of occupational knowledge and consumer economics (precision is 4% at a 95% confidence interval).

— 17 percent of the sample was not able, given a series of four newspaper "help wanted" advertisements, to determine which one was placed by a private person, rather than a corporation or public institution. This result yields an estimated 20,071,000 adults who are not able to perform this task.

— Given monthly earnings statement containing the gross salary, deductions by type, and net salary, only 74 percent of the sample was able to determine the total amount of deductions. Further, 33% of the sample, or a projected 38,960,000 persons are not able to interpret the earnings statement well enough to locate the deduction for social security.

— Thirty-six percent of the sample, given a W-4 form and information concerning the number of dependents, were unable to read, write, or compute well enough to enter the correct number of exemptions in the appropriate block of the form.

— Only 56 percent of the sample, when given a series of newspaper "help wanted" advertisements, were able to correctly match personal qualifications to job requirements. These results produce an estimated 52 million adults who are not able to perform the task as required by the survey.

— When given an incomplete business letter, only one-fifth of the sample was able to complete the "return address" section without making an error in form, content, spelling, or punctuation.

— Twenty-two percent of the sample was unable to address an envelope well enough to insure it would reach the desired destination, and twenty-four percent was unable to place a return address on the same envelope which would insure that it would be returned to the sender if delivery were not possible. These results indicate that an estimated 26-28 million adults are not able to address an envelope well enough to insure the letter will not encounter difficulties in the postal system.

— About one-fifth of the sample could not read an "equal opportunity" notice well enough to identify a verbal statement which defined its meaning.

— About one-fourth of the sample, or a projected 26 million adults, could not distinguish the terms "gross" and "net" correctly when given a simple situation involving total pay and pay after deductions.

— Almost one-fifth of the sample, or a projected 22 million adults, weren't able to read and interpret a tabular payment schedule well enough to determine the monthly payment for a given amount of indebtedness.

— A surprising 73% of the sample, or a projected 86 million adults, weren't able to accurately calculate the gasoline consumption rate of an automobile, given odometer readings and fuel consumption.

— Less than 40% of the sample when given a catalogue advertisement series of "for sale" ads which contained a notice for the same appliance, was able to correctly calculate the difference in price between a new and used appliance.

— More than three-fourths of the sample was unable to read, write, and compute well enough to correctly enter one total cash price for a mail order, given an advertisement with price information and a mail order form.

— Twenty-nine percent of the sample, or a projected 34.2 million adults, were unable to order a meal for two persons not exceeding a set amount, given a restaurant menu.

— Slightly more than one-fifth of the sample, or a projected 25.9 million adults, were unable to write a check on an account with out making an error so serious that the check would not be processed by the bank, or would be processed incorrectly.

— Only two-thirds of the sample was able, given three boxes of cereal displaying the name, net weight, and total price of the contents, to determine the brand which had the lowest unit cost.

— Over forty percent of the sample, or a projected 48.4 million adults, was unable to determine the correct amount of change on a purchase, given a cash register receipt and the denomination of the bill used to pay for the purchase.

Future Research

These results, with the results from dozens of other tasks not reported here, would suggest that far more adults are "illiterate," in the sense of being able to apply skills to problem areas which are derived from pragmatic adult requirements, than one might expect. As was noted earlier, a second national adult survey of performance on tasks keyed to the other three APL general knowledge areas will begin shortly. When this phase is completed, the set of objectives, "test items," and national estimates of adult performance related to these objectives should be a valuable resource for planning, developing, or evaluating educational programs on a variety of levels.

Chapter IV

OBJECTIVE

25. Students will be trained to perform survival tasks in our society as a requirement for completing programs.

PERFORMANCE INDICATOR - A survival instruction planning group comprised of instructional and student services administrators, faculty, students, and community members will determine student survival behaviors. They will determine the level of performance students must show in their behaviors to meet the requirements for completing programs. They will determine the proportion of all students who can pass the survival performance tests if the District is to satisfactorily meet this objective. A curriculum development team assigned by the Chancellor will prepare a plan of study which students can follow to learn acceptable levels of performance.

The performance indicator is the degree of variance between the criteria of acceptability (proportion of all students who can pass the survival performance tests) and the actual proportion of students who pass the performance tests.

SUGGESTION

The following tasks will be included in the survival training curriculum, as performance objectives.

- a. Writing checks
- b. Personal bookkeeping
- c. Consumer beware principles
- d. Basic business law
- e. Functions of city, local, state agencies of government.
How to participate.
- f. Voting process
- g. Economic cause and effect of the private enterprise concept -
a day's work for a day's pay.
- h. Working of our economic system including the profit system.

Chapter IV

- i. Dynamics of political policy making in the United States and other members of the community of nations in the world.
- j. Real estate processes related to owning property.

GOAL III
COST EFFECTIVENESS

GOAL

The organizational system of the San Diego Community Colleges will operate in ways which maximize occupational education "program and cost effectiveness."

1. Analyze each occupational program for program and cost effectiveness.

PERFORMANCE INDICATOR - Determine criteria for program and cost effectiveness of occupational programs. Compare the actual methods used in the work of staff with the program and cost effectiveness criteria. The degree of congruence is a performance indicator.

SUGGESTION

Possible criteria will include:

Stage I - Preliminary Data

- a. utility and quality of the advisory committee input.
- b. the facilities needed to operate the program.
- c. the manpower costs needed to operate both the instructional and support parts of the program including custodial, clerical, business, technical, managerial, and teaching assistants.
- d. facilities needed to operate the program.
- e. materials needed to operate the program including capital outlay and instructional supply monies.
- f. cost of (1) starting up the occupational program, and (2) maintaining the program.
- g. anticipated income generated by the program (e.g. state aid).

Stage II

- a. determine program benefits - the values and objectives the program meets. How valuable is the program compared to other programs.
- b. determine program effectiveness - the quality of instruction of the program compared to other programs.
- c. determine the priority of the program compared to other programs

c. (continued)

by a weighting system which assigns a total weight to each program that can be compared with the weights of other programs. The greater the weight the higher the priority of the occupational program for remaining in operation. This weighting approach will not work for the number of sections of a class. Factors in the weighting process include:

- program benefits
- program costs
- program effectiveness
- the relative supply of money to all programs.

SUGGESTION

A task group should be assigned under the leadership of the Director of Management Services to make operational a program and cost effectiveness methodology for instructional programs in the district.

OBJECTIVE TREATMENT - PHASE II

2. Develop and implement strategies for increasing the funding of programs through grants, governmental aid programs, and increased enrollment.

PERFORMANCE INDICATOR - A study group under the leadership of the Director of Management Services or his delegate will develop funding strategies and criteria for effectively using the strategy. The indicator of performance is the variance found in comparing the work of funding staffs with criteria for effective funding.

OBJECTIVE TREATMENT - PHASE II

3. Develop resource reallocation strategies when educational programs are closed out.

PERFORMANCE INDICATOR - The criteria of reallocation strategies will be

compared with the actual reallocation of resources from closed programs.

SUGGESTION

Insight gained from developing reallocation strategies can be applied to cost decisions in starting new programs, e.g. lease vs. purchase of equipment, etc.

OBJECTIVE TREATMENT - PHASE I

4. Develop a budget strategy for providing transportation to economically disadvantaged students to get from home to the site of their occupational program.

PERFORMANCE INDICATOR - The strategy developed will be validated by a consultant and administrators delegated by the Director of Management Services.

5. OBJECTIVE

Plan and form a Budget Review Committee that will review strategies of budget throughout the district.

PERFORMANCE INDICATOR - The Director of Management Services will plan and establish criteria for the operation of the Budget Review Committee. The degree to which the actual work of the committee conforms to the criteria of operation will be an indicator of their performance.

SUGGESTION

- a. the committee will review strategies for implementing new organizational units.
- b. the committee will review the strategies of all budgets.
- c. the committee will review the use of program and cost effectiveness methodologies used in the district.
- d. the committee will recommend the allocation of resources to the

d. (continued)

Chancellor via the Director of Management Services.

e. the committee membership will include administrators, faculty, staff, and students involved in operations within the District.

f. the Director of Management Services will form the membership of the committee.

g. the committee will insure that student member(s) will be compensated for their work on the committee.

OBJECTIVE TREATMENT - PHASE I

6. OBJECTIVE

Create a mid-management level to assist Deans of instructional programs. The new position will have authority to allocate resources for specific programs in their area.

PERFORMANCE INDICATOR - The Chancellor and his delegates will develop criteria for the delegation and use of this authority. The indicator of performance is the degree to which the mid-managers who allocate resources meet the criteria.

OBJECTIVE TREATMENT - PHASE I

GOAL IV
STUDENT SERVICES

GOAL - The San Diego Community College District will provide educational support services for students and prospective students in ways which help them make appropriate educational and retraining choices in order to meet their own particular needs.

The Student services include:

- All phases of registration
- Counseling
- Career Center operations
- Sharing guidance with faculty
- Testing for self knowledge
- Work Experience
- Placement
- Financial Aids
- Veterans Aids

REGISTRATION

1. OBJECTIVE

Develop and implement a registration system which provides the maximum available guidance services to students including pre-enrollment counseling and guidance so students have the best chance to select appropriate courses and majors.

PERFORMANCE INDICATOR - The indicator is the degree of variance between the criteria of operation for the system and the actual operation of the service.

OBJECTIVE TREATMENT PHASE II

2. OBJECTIVE

Develop and implement a needs identification procedure for students when they start the admissions process.

Chapter IV

PERFORMANCE INDICATOR - Develop criteria for implementation and operation of a needs identification procedure for students. When the procedures are implemented according to criteria and the operation of the procedure conforms with the criteria this objective will be met. The indicator is the degree of variance between the work and the criteria.

OBJECTIVE TREATMENT - PHASE I3. OBJECTIVE

Establish a system where students will be able to enter most classes they need to complete their majors.

PERFORMANCE INDICATOR - The indicator is the degree of variance between the criteria of operation for the system and the actual operation of the service.

An estimated performance indicator is that 90% of the students will be able to enter the classes they need.

OBJECTIVE TREATMENT - PHASE II4. OBJECTIVE

Establish a system where students will be able to complete a specific program in the time allotted in the catalog.

PERFORMANCE INDICATOR - The indicator is the degree of variance between the criteria of operation for the system and the actual operation of the service.

OBJECTIVE TREATMENT - PHASE II5. OBJECTIVE

Establish a two semester (academic year) class schedule.

PERFORMANCE INDICATOR - This objective will be achieved when a two semester class schedule has been established.

Chapter IV

OBJECTIVE TREATMENT - PHASE I6. OBJECTIVE

Establish a system where students will not be delayed by class conflicts or lack of classes except in unusual circumstances.

PERFORMANCE INDICATOR - This indicator is the degree of variance between the criteria of operation for the system and the actual operation of the service.

SUGGESTION

The class schedule will be completed three months before the Fall semester begins.

OBJECTIVE TREATMENT - PHASE II7. OBJECTIVE

Provide the student with a structured opportunity to learn before enrollment how to use all student services available to him such as counseling, career center guidance, financial aids, veterans services, student affairs services, work experience, placement, tutoring and learning center services.

PERFORMANCE INDICATOR - This indicator is the degree of variance between the actual operation of this service and the criteria for the operation of the structured learning opportunities.

SUGGESTION

- a. Use tape and automatic slide presentations for the structured learning opportunities.
- b. Use simple instructional programming techniques. (e.g. linear programs)

Chapter IV

8. OBJECTIVE

Develop and implement a system which will simplify registration for the student and make it easy.

PERFORMANCE INDICATOR - The Director of Instructional and Student Services and his delegates and the chief site administrators and their delegates will plan and implement the system. The indicator is the degree of variance between the criteria of operation for the system and the actual operation of the service.

SUGGESTION

- a. Develop and install on campuses computerized systems of student registrations, enrollment, student data, instructional data, and follow-up studies. Show closed classes, prerequisite for classes, etc.
- b. Pre-register by mail to the extent possible.
- c. Orient students to the physical layout of the campus.
- d. Use tape and automatic slide presentations for:
 1. Registration,
 2. Introduction to career counseling. Show both positive and negative aspects of occupations. Show job environments as well as job requirements.

OBJECTIVE TREATMENT - PHASE II9. OBJECTIVE

Develop and expand open-end enrollment procedures for class offerings.

PERFORMANCE INDICATORS - The indicator is the degree of variance between the criteria of operation for the procedures and the actual operation of the service.

Chapter IV.

SUGGESTION

This procedure will promote the (1) accessibility of courses to students, and (2) recruitment of students.

OBJECTIVE TREATMENT10. OBJECTIVE

Develop and implement a process which will help people in the community crystalize their decisions on how best to take advantage of the opportunities available to them at the Community Colleges.

PERFORMANCE INDICATOR - The indicator is the degree of variance between the criteria for the process which will help people crystalize their decisions and the actual operation of the service.

SUGGESTION

The District staff can indicate the probabilities of job placement in the various occupational programs after completion. The District can also develop a variety of audio visual programs.

OBJECTIVE TREATMENT - PHASE I11. OBJECTIVE

Plan and implement a "team counseling" approach between the faculty of occupational programs and the career center - counseling center staff.

PERFORMANCE INDICATOR - The indicator is the degree of variance between the criteria for the team counseling approach and the actual operation of the service.

SUGGESTION

This unified service has the potential to help the student on a continuing basis.

OBJECTIVE TREATMENT - PHASE I

Chapter IV

12. OBJECTIVE

Develop a procedure for granting credit at the colleges in occupational programs for similar work completed successfully at the various educational levels including Adult Centers, the Skill Center and four year colleges.

PERFORMANCE INDICATOR - The indicator is the accuracy with which "evaluators" conform to the criteria for granting credit.

OBJECTIVE TREATMENT - PHASE I13. OBJECTIVE

Develop the procedures for and establish an advisory committee on student services.

PERFORMANCE INDICATOR - The indicator is the degree of variance between the criteria established in the plan for the implementation and operation of the Student Services Advisory Committee and the actual operation of the Advisory Committee.

OBJECTIVE TREATMENT - PHASE ICAREER CENTER14. OBJECTIVE

Develop a plan for the operation of and implement of comprehensive career centers for City, Mesa, and Evening Colleges and for the Skills Center and clusters of College Adult Centers on the basis of resource priority.

PERFORMANCE INDICATOR - The indicator is the degree of variance between the criteria established for the plan of operation and implementation, and actual implementation and operation of the comprehensive career centers.

Chapter IV

SUGGESTION

a. Include in a career center the following services for students:

1. Job seeking placement and placement counseling. Job market information.
2. Work experience enrollment and counseling. Wherever possible, students should have opportunities to visit and/or have work experience within the career area of their choice.
3. Establish an advisory committee for all District Career Center Operations.
4. Occupational exploration counseling.
 - (a) Occupational information - include cue card decks of occupations organized into career clusters.
 - (b) Principles of career exploration - explore in career clusters.
 - (c) Occupational analysis techniques.
5. Self appraisal counseling.
 - (a) Testing for academic and occupational performance.
 - (b) Administration of career related interest and value inventories.
 - (c) Teach the applications of career choices and strategies.
 - (d) Educational planning counseling related to career objectives.
 - (e) Financial aids assistance to students.
 - (f) Enrollment in mini-courses.
 1. Develop mini-courses with open entry and exit for which students can obtain credit.
 2. Mini-course topics could include:
 - a. world of work and classification of occupations.
 - b. self appraisal.
 - c. occupational exploration and analysis.
 - d. career choice principles and strategies.
 - e. career related educational program planning.
 - f. job seeking and interview principles and skills.

Chapter IV

6. Organize occupational information into:

- (a) Job markets and industrial enterprise information.
- (b) Occupational patterns-local-regional-national.
- (c) Future manpower trends
- (d) Occupational briefs, books, pamphlets, tapes, and audio-visual presentations.
- (e) Educational institution information for transfer purposes.

b. Establish as a part of the Career Center services the following organizational units:

- 1. Placement Service
- 2. Financial aids service
- 3. Career counseling and exploration
- 4. Work experience
- 5. Educational planning
- 6. Counseling liason with occupational faculty

OBJECTIVE TREATMENT - PHASE IIPLACEMENTSUB GOAL

Provide the student with job placement services which are consistent with the career choice strategy of the person whenever possible.

15. OBJECTIVE

Provide placement services for every student who desires placement after completing an occupational program,

PERFORMANCE INDICATOR - The proportion of the students who are appropriately placed compared to the total requesting placement is the major criterion for this objective. The Director of Instructional and Student Services or his delegates will determine the specific proportion which meets this objective.

OBJECTIVE TREATMENT - PHASE I.

Chapter IV

16. OBJECTIVE

Provide coordination of information and activity between faculty, prospective employers, responsible administrators, and career counselors for the benefit of students.

PERFORMANCE INDICATOR - The degree of variance between the criteria established for the plan of operation and the actual operation of this coordination service.

OBJECTIVE TREATMENT - PHASE I17. OBJECTIVE

Placement officers will coordinate with faculty and counselors to insure that each client is optimally prepared for job seeking and job keeping skills and knowledges.

PERFORMANCE INDICATOR - The degree of variance between the criteria which define "optimally prepared" and the actual preparation of students for job seeking and holding is the indicator of performance.

OBJECTIVE TREATMENT - PHASE I18. OBJECTIVE

Identify and develop as many placement opportunities as possible in the community.

PERFORMANCE INDICATOR - Criteria created from a plan to develop placement opportunities will be compared with the performance of the placement officers. The variance between the two will be the indicator of performance.

OBJECTIVE TREATMENT - PHASE I

Chapter IV

19. OBJECTIVE

Insure the placement officers make available to students the probabilities of job placement in the various majors before students enroll in the major or program.

PERFORMANCE INDICATOR - The variance between the criteria established for this service and the actual operation is the indicator of performance.

SUGGESTION

The placement officer or his/her staff will become resource counselors during the admissions or pre-entry counseling phase of the registration process.

OBJECTIVE TREATMENT - PHASE I20. OBJECTIVE

The "occupational role concept" will be one of the units of communication when describing jobs or occupations.

PERFORMANCE INDICATOR - The variance between the criteria established for describing the occupational role concept and using it as a unit of communication and the actual operation is the indicator of performance.

OBJECTIVE TREATMENT - PHASE I21. OBJECTIVE

Evaluate the effectiveness of the placement function.

PERFORMANCE INDICATOR - The criteria established for evaluating the function and the operation of actually evaluating the function is the indicator of performance.

Chapter IV

SUGGESTION

The following operations will be included in the evaluation plan.

- a. self reports of students after they complete the placement process.
- b. follow up studies on students placed through placement office.
- c. reports from employers on the effectiveness of the placement function.
- d. faculty reports
- e. career center staff reports
- f. management consultant reports on the effectiveness of the service.

OBJECTIVE TREATMENT - PHASE I22. OBJECTIVE

The placement officer will evaluate the use of placement information in student services and the instructional areas.

PERFORMANCE INDICATOR - The degree of variance between the criteria established for the use of placement information and its actual use by student and instructional services is the indicator of performance for this objective.

OBJECTIVE TREATMENT PHASE I

GOAL V

FUTURISTICS

If the San Diego Community Colleges are to meet the needs of the community, a far more intensive effort of estimating the future accurately will have to be made. Cultural change is occurring at a more rapid rate than ever before in history. This will have an increasing impact on the operation of the community colleges. Even now, we are required to submit educational program plans for every building proposed to the Office of the Chancellor of the California Community Colleges, and it takes five years lead time to gain approval of proposed buildings. Right now we have a requirement to know and plan for what is five years ahead.

The organization of a Futuristics Team for servicing a wide variety of Community College units is needed now. It is suggested that the Futuristics Team could operate in the District Office of Planning and Evaluation Services with close communication ties to the office of Manpower Training and Vocational Education, and other instructional services. The Coordinators located in the Vocational Education Office presently generate a considerable body of futures information.

The suggestion for locating the Team in the Planning Office is to prevent proprietary use of the information. Carefully evaluated futures information should be transmitted and received over a carefully worked out communications network to stations throughout the district offices and the campuses.

Futures information is crucial to top management decision making, to planning, to curriculum development, and to campus managers for their own planning. Information from a variety of operating or line locations can feed important information into the network which can help evaluate futures and show the Futuristics Team how to better serve their various customers.

Dr. Thomas Acheson, Department of Management, School of Business, San Diego State University, who is a member of Task Force II, has made significant comments which should be considered in the establishment of a Futuristics Team.

Chapter IV

1. The major problem of any sophisticated futuristics model is "Where do we get the information to put into the model?"
A mistake or danger related to the outcomes of futures modeling is that people believe the model and tend to forget the kinds of data that are put into the model.
2. The purpose in any futures prediction model is to obtain convergence or agreement of a wide variety of data. This increases the reliability of future predictions. Disagreement or divergence of information should cause reassessment of the data.

The modeling process is to work back from today to yesterday. He suggests that modelers attempt to work back four years, then identify those factors or data which predict where we are today. Use these factors then to predict into the future.

The use of moderately reliable future information is to make decisions. A caution is that a great deal of information available is too old.

Most business oriented manpower planning into the future is three to six months from the present. Models should predict alternate futures which are dependent on the major variables that direct futures.

3. Parts of a future model for the San Diego Community Colleges should include the following which are similar in some cases to the Futuristics objective #2.
 - a. Direct information or demand from employers in business and industry.
 - b. General economic trends.
 - c. Growth pattern trends.
 - d. Demand from students.
 - e. Migration pattern of our students.

Chapter IV

- f. The retirement projections of the work force in the respective occupational areas.
- g. The occupational skill and knowledge inventory of military personnel in the area who are near retirement.
- h. Popular trends in employment. The "in thing" to do.
- i. The number of people trained compared to the job openings in the community influences the manpower supply and demand ratio. Included should be the number of students in majors or programs preparing for available jobs.
- j. Replacement needs should be identified as separate from additional manpower needs.

Dr. Acheson stressed emphatically the need for this district, or any district, to prepare as carefully as the faculty associations and unions for the process of collective bargaining.

The following objectives are a guide to the establishment of a Futuristics Team in the San Diego Community Colleges.

Chapter IV

GOAL V

GOAL.

The San Diego Community Colleges will develop and use a Futuristics team to study, predict, and distribute information about alternate futures, and to act as a service agent to organizational elements in the District.

1. OBJECTIVE

The Chancellor will develop and implement a plan on how the District may use effectively futures information.

PERFORMANCE INDICATOR - The Chancellor or his delegates will develop a plan on how the District may use effectively futures information. Completion of this plan indicates achievement of the first part of objective. Implementing criteria will be developed as an indicator for the "implementing" part.

SUGGESTIONS

- a. The plan will include the development of a communications network.
 - The network will incorporate criteria for collection, monitoring disseminating and using futures information. The network will emphasize two way communication both intra-campus and inter-campus and district. The network will establish criteria for message transmission between sender and receiver and reciprocal transmissions.
- b. The network stations will include:
 1. chief site administrators,
 2. second level managers of the site,
 3. curriculum and instructional planners,
 4. student services faculty and staff,
 5. budget priority judges,
 6. second level managers of the district,
 7. master planning organization manager,
 8. placement officers, career center coordinators, work experience coordinators.
- c. All major departments and divisions both district and campus will

Chapter IV

c. (continued)

be stations in the communications network plan.

OBJECTIVE TREATMENT - PHASE I

2. OBJECTIVE

The Futuristics specialist will develop a plan on how to collect futures information and evaluate it so that its reliability is maximized.

PERFORMANCE INDICATOR - The Futuristics specialist and his delegates will develop a plan on how to collect and evaluate futuristics information. Completion of this plan indicates achievement of the objective.

SUGGESTION

- a. The collection of futures information will include the following information categories.
 1. Public utilities analysis of the future.
 2. County planning departments analysis.
 3. National level futuristics study or planning groups.
 4. Statistical data which shows a variety of past and present relationships relating to economic, manpower, technological and educational relationships.
 5. Jobs available from want ads.
 6. National trends relating to economic, manpower, technological and educational activities.
 7. Political trends and legislative changes which affect manpower needs and resources in the community.
 8. Interviews with planners from local and national businesses and industries.
 9. Interviews with advisory committees.
 10. Identification of sources which staff manpower needs in San Diego County.

Chapter IV

11. Community surveys.
- b. Vocational Education Coordinators will participate in the collection and evaluation of data.

OBJECTIVE TREATMENT - PHASE I3. OBJECTIVE

Conduct a feasibility study on the location of facilities and resource requirements for the optimum operation of a Futuristics Unit.

PERFORMANCE INDICATOR - The Chancellor will delegate his representatives to conduct this feasibility study. This objective will be achieved when the study is delivered to the Chancellor.

OBJECTIVE TREATMENT - PHASE I

This chapter has presented five primary goals. Thirty-five objectives were prepared for the Organization goal, twenty-five for the Instruction goal, five for Cost Effectiveness, twenty-two for Student Services and three for Futuristics.

Each objective was designed as a management objective which can change the output of the organization. It is strongly urged that after agreement has been reached on what objectives to adopt, a "change analysis" should be applied to each one. Also, each objective should be placed on a time line for implementation.

CHAPTER V

WHAT OCCUPATIONAL PROGRAMS GO WHERE?

We have presented a view of the future in terms of a philosophy, the locality of San Diego, the manpower picture between 1975-85, and goals and objectives.

Our community is also becoming more aware of how the instructional services of our District can help people upgrade themselves in their job or prepare for better paying ones. More and more residents are also becoming aware of the opportunities to retrain which frees a person to move to another occupation or cope with unemployment.

San Diego is a "Navy town." More and more service people are grasping the opportunity through our expanding programs to prepare for re-entry into the civilian world of work or for greater responsibility in the Navy. In addition to campus locations, the picture of where we need to go should show which programs are allocated to which sites in the community where business and industrial activities are carried on.

The allocation of programs give body and character to the various parts of the college system.

CAREER CLUSTERS

Prerequisite to allocating occupational programs is the development of programs fashioned into building blocks. The name given to these building blocks is Career Clusters. The way these blocks or elements of blocks go together on a campus becomes in large part the identity of that campus.

The definition of Career Cluster in this report is a cluster of occupational programs with common strands of vocational interests and somewhat similar activities running through all the programs.

There is the assumption that the task of identifying occupations which students in each program may enter is relatively straightforward.

College planners can assemble courses through career clusters in which the faculty, equipment, facilities, and kinds of students are somewhat similar. Planners and managers can often more easily reallocate the resources of time, money, and personnel in these clusters to accommodate cycles, or directions of the community's demand for labor, or the students' demands for educational services.

Each Career Cluster will have built into it a career ladder system. This ladder will show students how they can progress from the less complex programs to the more complex ones. To do this, each cluster will stratify its programs into levels of complexity. These levels identify both the complexity of instruction and infer the complexity of the job.

Career Clusters have the advantage of allowing students to explore in educational-occupational pathways which are somewhat similar. The Career Cluster organizes occupational exploration into a more efficient activity for our students.

This stratification of complexity level permits the District to group similar levels of complexity of programs at the same site.

Here is an example of a Career Ladder within a cluster:

<u>Occupational Program</u>	<u>Site Location related to level of complexity</u>
Automechanics Automotive Technology Option 1 Industrial Technology	Skill Center Community College 4 year college after completing prerequisites
Option 2 Mechanical Engineer	4 year college after completing prerequisites
Option 3 Business Management (Car Business)	4 year college after completing prerequisites

These ladders need to be developed within each cluster. There was insufficient time to complete this task for this report.

The concept of open entry - open exit should be integrated into the career cluster concept. For example, a student may take a Skills Center course in Welding, then go to work for a year. He becomes interested in the field and wants to advance. He returns to City College, majors in Welding Technology and earns a A.S. degree. He gets college credit for his work at the Skill Center. It partially meets his lab or practical work in Welding.

It may be possible for him to take part of a semester at a time in some of his work. He has more degrees of freedom as to when he can enter and when he can leave some courses of study than the traditional structure. This is another aspect of open entry - open exit.

Our student then completes his pre-engineering prerequisites at night while working as a Welding Technologist. Three years later he transfers to a four year college and majors in mechanical engineering. While attending the university, he works summers as a Welding Technologist to earn money for his education. There is almost an infinite variety of patterns a

student may follow in meeting his educational needs through this approach.

The career clusters and occupational programs for each cluster are shown in Appendix C. These were acceptable to the task force on a "first reading" basis. They are recommended in this report as the SDCC Career Clusters pending a routine review and analysis of all work in the report.

The proposed Career Clusters are:

AGRICULTURE, ENVIRONMENTAL AND ENERGY CONSERVATION

BUSINESS, MARKETING AND DISTRIBUTION

MANAGEMENT AND SUPERVISION

CONSTRUCTION

ENGINEERING RELATED, DESIGN AND PRE-PROFESSIONAL

ELECTRONICS AND ELECTRICAL

HEALTH SERVICES

MEDIA, CREATIVE ARTS, HUMANITIES

OFFICE

PUBLIC AND PERSONAL SERVICE

TRADE AND TECHNICAL

TRANSPORTATION: SERVICES AND OPERATION

LEVELS OF COMPLEXITY

Task Force members had a vigorous challenge when they came to grips with the problem of identifying levels of complexity. The first effort to stratify programs produced the following classifications:

Pre-professional.

Technical

Para-professional

Trade

Retraining

Job Upgrading

Appendix C, page 1 shows this classification system.

The problem which Task Force members found with this first approach was the

ambiguity of terms such as para-professional, technical, and vocational which was inserted and then withdrawn. They meant different levels of complexity to different people and none of the major occupational classification systems used them to classify one level of job complexity.

Suggested site locations for each occupational program are also detailed in Appendix C along with the rejected "level of complexity" classification. The complexity levels and site locations in the present chart, which is Appendix C, need to be rewritten.

A new program complexity level classification was worked out by members of the Task Force. It is recommended for consideration and displayed here not only as a classification system, but as a basic guide to site allocation which is one of the major charges to this Task Force.

**BASIC SITE ALLOCATION GUIDE
FOR OCCUPATIONAL PROGRAMS
AND PROGRAM COMPLEXITY LEVEL
CLASSIFICATION**

**OCCUPATIONAL
SKILL LEVEL**

**SKILL LEVEL
DESCRIPTION**

**SITE
CLASSIFICATION**

I	Basic Skills to meet minimum job entry requirements 18 - 20 weeks	1. Skill Centers 2. Adult Centers 3. Satellite Locations in community 4. E.C.C.
II	Maximum of one year length programs with heavy concentrations on specialized skills	1. Adult Center 2. E.C.C.
III	One and two-year programs with more complex theoretical and/or manipulative requirements which can lead to an Associates Degree or transfer to a four year college	1. College Campuses
IV	Job Upgrading: course time length varies from weeks to months. Subject matter ranges from simple to complex. Concentration on specialized skills and knowledges.	1. Evening College 2. Government, business, and industrial sites.

**ANCILLARY
CATEGORIES**

DESCRIPTION

**SITE
CLASSIFICATION**

1A	Enrichment, Living Skills	1. Adult Centers 2. Satellite Locations
1B	Basic Education Skills - Career Diploma - High School Exploratory Opportunities	1. Adult Centers 2. Satellite Locations
1C	Special Vocational Education Programs	1. Adult Centers 2. Skill Centers 3. E.C.C. 4. Evening College

Objective #13, Goal II - Instruction, has listed some suggested criteria that may be used in the site selection criteria.

An interview was conducted with the Presidents of City, Evening, Mesa, and the Miramar campuses and the Director of the Adult Centers to learn their views on how they see the arrangement of programs and career clusters on their campuses in the future. A general discussion was held with the Director of E.C.C., but a more specific interview still needs to be conducted with him for this purpose.

There has not been sufficient time to write up and verify with each one the views of these chief administrative officers.

To answer the question raised in this chapter, "what occupational programs go where?" further study is required. Some prerequisite questions have been answered subject to review which are:

1. The arrangement of career clusters or "building blocks" of programs.
2. A basic guide for site allocation of programs and the stratification of complexity of programs...

We still need to answer these questions:

3. What will the future community surrounding each campus be like in 1985 and 1995? (It is assumed this information is available for collection and analysis)
4. What resources, using alternative estimates, will be available to each campus between now and 1985?
5. How does each campus view itself as developing career clusters and occupational programs? (the faculties, Deans of Vocational Education and Presidents of each campus need to be interviewed in order to obtain data necessary to answer this question adequately)

These five kinds of information need to be integrated to answer the basic question, "How do we allocate vocational programs among our various colleges and centers?" A set of site selection criteria for occupational programs needs to be established.

The following staff manpower estimates are suggested as needed to answer the project question. It will be necessary to obtain the cooperation

as needed of Presidents, Deans of Vocational Education and Coordinators.

Question #3	5 mandays	Management Studies Staff
Question #4	3 mandays	Management Studies Staff
Question #5	10 mandays	Management Studies Staff

An integration of the information and the development of a plan will take 10 mandays. This includes feedback time between interviewees and staff. It also includes a meeting with an advisory group of community members to react to the proposals recommended in the plan. Total mandays is estimated at 28.

CHAPTER VI
RECOMMENDATIONS

The management objectives developed in this report will lead the way, if approved and acted upon, to major changes and improvements in the Career Education effort of the San Diego Community College District.

The following specific recommendations are listed with the exception of recommendation No. 1 which is comprehensive in nature.

1. Develop and implement an organizational strategy which will translate into action all objectives after analysis and acceptance by the governance body of the San Diego Community Colleges.
2. Implement at the earliest opportunity a survival education program.
3. Establish an intensive seminar program to qualify all community college counselors as effective career counselors. Orient and familiarize occupational program faculty with career counseling processes so they may participate effectively in the career guidance activities of their students.
4. Allocate the Master Planning and Management Studies Staff the time necessary to answer in depth the question, "How do we allocate vocational programs among our various colleges and centers?" Inadequate treatment of this question can hamper the optimum development of our community college district.
5. Reallocate resource savings generated by using innovative methods to reduce the cost of instruction.
6. Commission a consultant in Futuristics to assist the San Diego Community Colleges establish an organization, operating procedures, a communications network, and a methodology for a Futuristics Team.
7. Prepare intensively for collective bargaining which appears to be drawing close to implementation.

Chapter VI
RECOMMENDATIONS

8. Establish an effective operation for a county wide vocational education council for the purpose of articulation between institutions in the county. Particular attention will be given to the balancing of manpower training outputs with community needs.
9. Each objective approved for incorporation into the master plan will be treated with a "change analysis" and placed on a time line for implementation.
10. Assign a task group under the leadership of the Director of Management Services to make operational a program and cost effectiveness methodology for instructional programs in the district.

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