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**ABSTRACT**

This is a survey of some of the career education programs existing in the Los Angeles area which are collaborative efforts among the agencies of labor, business, industry, and education. The majority of the programs are for grades 10-12. Included are one or more page descriptions of programs developed at UCLA such as the "Kingdom of Could Be You" (for preschool age children), Project Cadre: a cadre approach to career education infusion, and Project BITE: counseling on vocational choices of inner-city high school students. Also included are descriptions of seven programs of the Los Angeles Public Schools such as the Youth Motivation Task Force in which volunteers from business and industry share their experiences in the world of work with students, Junior Achievement--providing small business experience for high school students, and the career center and advisor programs that all Los Angeles County high schools have established. The report concludes with a master plan, recommendations, and generalizations for coordinating the career education activities of this metropolitan area. (BE)

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COMMUNITY INVOLVEMENT IN CAREER EDUCATION:  
A METROPOLITAN AREA EXAMPLE

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## FOREWORD

The intent of this study was to make a cursory examination of some of the major, and visible, examples of collaborative efforts among the agencies of labor, business, industry, and education in the Los Angeles metropolitan area. It was beyond the scope of the study to make a detailed examination of all examples of such collaborative efforts. However, it is believed, upon the basis of the study, that such collaborative efforts tend to be fairly widespread. At no time in the past has the climate for such cooperation been more favorable, nor has enthusiasm within business and industry been more evident.

Three persons assisted in gathering and interpreting data for the study and in the preparation of the report. Ms. Nancy Goff Sartin, Administrative Analyst, UCLA; Mr. J. Lyman Goldsmith, Research Project Director, Division of Vocational Education, UCLA, formerly Director of Vocational Education and Administrator of Career Education, Los Angeles City Schools; and Dr. Lee W. Ralston, formerly Administrator of Vocational Education, Los Angeles County Schools. All three have been deeply involved in career education efforts during the past decade.

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## INTRODUCTION

Collaborative effort between the schools and the community at large have been regarded as an imperative relationship which will ensure an appropriate adjustment of youth to the world in which they will live and work. Probably such cooperative relationships represent the best pattern to follow in promoting an ideal transition of youth from school to work. The same collaborative idea applies in assisting youth to understand the social mores of the world in which they live.

The very essence of career education is built upon the idea of using collaborative relationships between the schools and business and industry to reflect realistically the world of work. Collaborative relationships between education and the activities of business and industry allow youth to be involved in the work of business and industry as an integral part of their educational process. It is not an academic relationship, it is an involved relationship which provides real-life experiences in the day-to-day activities of work in an actual business or industry environment. Career games and simulation have a place in career education, but these cannot substitute for the real thing. It is as difficult to understand something you have not experienced as it is to return from some place you have never visited.

Collaborative efforts of education and business and industry have always been an integral aspect of vocational education. Around the turn of the century the promoters of the vocational movement in education determined that: (1) the school, solely in its own environment, cannot provide the actual working conditions and relationships of business and industry, (2) business and industry in its environment, cannot alone provide all of the values to be derived from the school environment, but that (3) the two working together can provide the necessary optimum environment for the proper transition of youth from school to work. This is the same principle at work in career education at the collaborative relationship level.

Collaborative relationships of education and business and industry are not limited to any particular educational level, although the nature of the relationship does vary with the educational level. Although this paper reflects involvement of youth in school, primarily in grades 10, 11, and 12, the paper does not suggest that such collaborative relationships should be limited to these grade levels. This paper merely reports some of the activities found in operation in a large metropolitan area, and these activities have been concerned primarily with the upper grade levels. Furthermore, these collaborative relationships have had a strong vocational emphasis, that is, through a variety of on-site

business and industry experiences students can pursue vocational goals more realistically.

A half century ago, during the progressive education era, some students had educational experiences in what were termed F and B courses in school. F and B represented finding and broadening courses which enabled students to take, primarily in junior high school, 4-6 week courses in a variety of subjects. The students not only found out what the subjects meant, but they broadened their knowledge of the subject which provided a sound base for more accurate subject matter decisions. Some schools of the progressive education era extended the F and B concept to the community at large and provided a kind of collaborative relationship with business and industry. In many respects the collaborative goals of the career education era resembled some of the earlier concepts of the progressive education era. The idea that what persons learn in school is only a part of their total education is exemplified by the collaborative efforts of education working with the community at large.

With the advent of the career education movement the nation has witnessed what amounts to an all-out commitment of labor, business, and industry to be of assistance in the education of youth. Concern has been expressed about providing experiences which will lead individuals into satisfying jobs and careers. Concern has also been expressed that all students leaving school (either as high school graduates or dropouts, or as college graduates or dropouts) should have achieved marketable skills as a part of their education. In short, labor, business, and industry have indicated unquestionably their interest and desire to assist in equipping youth for the world of work. The problem has been one of how to develop effectively this collaborative resource. Neither education nor business and industry have found precisely how to develop these collaborative relationships.

From an educational point of view there are three things about the contributions of business and industry that must be known. First, the kinds of contributions from business and industry that are possible, and how these contributions relate to the education and work goals of students at a particular grade level. Second, of the total possible kinds of contributions from business and industry, the contributions business and industry are willing to make. (Obviously, labor laws, insurance, and safety regulations have a bearing upon the kinds of assistance that business and industry are willing to undertake.) Third, of the kinds of assistance that business and industry are willing to make (and are permitted to make), the experiences in business and industry that have real educational value and work-related value for the student.

As mentioned previously, this paper focuses attention upon collaborative relationships that are provided at the time a person is preparing to actually enter upon employment. Some collaborative

efforts may not be appropriate for this period of time or may not be consistent with student goals. Field trips to business and industry, and speakers from business and industry may have less value at this period of time than actual on-site work experiences. If the career education concept has been adequately applied during the student's educational career many of the awareness and exploration values of collaboration may have been achieved. On the other hand, some of the collaborative efforts cited in this paper are applicable to earlier career education experiences.

Two other points of view are important in planning and executing collaborative efforts between education and business and industry. First is the centrality of work in the lives of individuals. Most people will spend from 25 to 40 years in the nation's labor force. A person's total life is colored measurably by his or her occupational experiences. These experiences have overtones that affect how a person acts as an individual, a citizen, as a member of a family, and that determine the kinds of contributions a person makes to the total well-being of society. About 30 years ago the National Manpower Council determined that people (youth and elders alike) are deterred from desirable occupations more because of ignorance of the many ways in which people work than by any element of cultural, racial, or religious origin. One of the purposes of career education is to be concerned with this situation. The second point of view is the primacy of the person. Individuals have a right to find the most appropriate "fit" for themselves in the world of work. This right must provide adequately for all of the personal and intellectual characteristics of individuals. No one is to be denied access to the world of work. Individual rights have been much in the news in recent years and are related to special considerations for groups of people as well as for individuals. These two points of view impact upon the activities of schools and business and industry as an integral part of career education.

One of the tragedies of American education is that many students leave school, at whatever level, without having clearcut occupational goals and without having made appropriate preparation to enter the world of work. As a result, students "settle for" a job--any job--that may be far-removed from their interests, abilities, and potential. This contributes to the massive unemployment problem, to dissatisfied workers, to educational dropouts, to no-major majors in college. The goal is to "prepare for" the career of an individual's choice. It is believed that this requires more than casual consideration by the individual, and that collaborative efforts of education and business and industry will help.

Career education and vocational education are elements in the same series--one term is not a synonym for the other. Vocational education deals primarily with the actual preparation for work--

learning how to be an automechanic, for example. Differences between the two terms--career education and vocational education--sometimes appear to be slight, particularly when one is thinking about the actual instructional program in some phase of skill training. However, career education is a much broader term and covers a greater degree of the educational grade scale. If a person has had the benefit of a comprehensive career education experience, particularly during the years from kindergarten to 10th grade, that person probably could enroll in vocational education classes with a greater degree of assurance that the occupational choice has been sound. One thing for certain is that if a person has had the benefit of career education experiences, the chances for success in vocational education are greatly magnified. Vocational education has had the benefit of collaborative experiences with business and industry for more than 60 years, thus the enthusiasm for cooperation with the world of work is shared with career education.

LEADERSHIP IN VOCATIONAL EDUCATION  
UNIVERSITY OF CALIFORNIA, LOS ANGELES

Projects in vocational education and career education originating through UCLA have been developed by the Los Angeles office of the Division of Vocational Education, University of California, and through the Graduate School of Education, UCLA. Most of these activities have had strong collaborative relationships with labor, business, and industry. During the 1930's, 40's, and 50's, the Division of Vocational Education conducted hundreds of foreman, management, supervisor, and teacher education projects for a variety of businesses and industries including police and fire services. Each of these experiences confirmed the validity of collaborative relationships between education and business and industry. During the 1960's and 70's activities have focused more directly upon projects involving schools and business and industry as opposed to educational projects conducted by UCLA with business and industry. Some of the more recent examples of these collaborative relationships follow.

Development and Validation of Instructional  
Programs for the Allied Health Occupations

This project, conducted between 1968 and 1973, involved the development of task analyses and curriculum material for 26 areas in the allied health field. Occupational analyses developed for these various areas were realistic in terms of the jobs actually being performed. Advisory committees, consisting of experienced personnel in the occupational area concerned, monitored the progress of each study. Instructional programs were validated in actual working conditions.

The wide range of collaborative relationships developed for the project may be illustrated by indicating the business and industry representation of members on the National Advisory Committee.

- The Times-Mirror Company, Los Angeles
- American Vocational Association, Washington, D.C.
- American Hospital Association, Chicago
- Children's Hospital, Los Angeles
- California Federation of Labor, San Francisco
- National Institutes of Health, Washington, D. C.

- Public Relations Consultant, Beverly Hills
- American Medical Association, Chicago
- Department of Labor, Washington, D.C.
- Blue Cross Association, Chicago
- National Health Council, New York
- Veteran's Administration, Washington, D.C.
- Department of HEW, Washington, D.C.
- U.S. Office of Education, Washington, D.C.
- Association of Schools of Allied Health Professions, Washington, D.C.
- American Association of Junior Colleges, Washington, D.C.
- Mount Sinai Hospital, Los Angeles
- American Dental Association, Chicago
- Department of Defense, Washington, D.C.

In a similar manner, the technical advisory committees for various occupational groups (Nursing, Radiologic Technology, Social Service, Medical Records, and others) consisted of appropriate community and industry representatives. Thus in the health area, where the margin of error must be small, instructional material for the training of a variety of technicians and other paramedical professions was developed utilizing the best of actual practice and backed up by the best of underlying theory. Development and validation of instructional programs for the allied health occupations could not have been carried out successfully without the wholehearted cooperation and collaboration of representatives from the health field. The project influenced allied health instruction in all of the states in the nation and in 38 foreign countries. Publications of the project, which are updated by collaborative efforts, are still in continuous demand by the health field.

## Introduction to Allied Health Careers

### Secondary School

Data produced by the allied health program were adapted to formulate a special secondary school program for grades 10, 11, and 12 in four metropolitan area high schools. Three steps of career education--awareness, exploration, and preparation--were used in the experimental program which combined class instruction in school with actual on-the-job experiences in hospitals and other cooperating health agencies. This program required a high degree of collaboration with the cooperating groups and included a number of special instructional planning sessions with supervisors from the cooperating agencies concerning the on-site instruction. Students acquired actual experience in several of the allied health areas during the tenth grade, participated in work-study programs in the eleventh grade, and graduated to a cooperative education plan which included specialized instruction in the twelfth grade.

Upon completion of the program, students could enter employment, take a part-time job and continue their education, or enroll in postsecondary instruction in an advanced phase of the allied health area. The program was highly successful and included a number of spin-off values such as the documented fact that students raised their grade point averages in other school subjects by at least one grade point.

In addition to the instructional program, project coordinators conducted group and individual parent orientation programs. In short, the parents were involved in a collaborative fashion and much of the success of the allied health program came from contributions of the parent groups. Parent conferences together with the cooperation of health groups represented the ultimate in collaborative effort. Such total collaborative effort was unquestionably one of the major success factors of the program.

Teacher's manuals and student's manuals were developed for the experimental program. In addition, a comprehensive instructor training program was conducted, in collaboration with cooperating agencies, in order to prepare instructors for the program beyond the experimental phase. The allied health program for secondary schools was replicated in other schools in the metropolitan area, in other cities in California, and in other states.

## "The Kingdom of Could Be You"

The U.S. Office of Education, through the Bureau of Adult, Vocational and Technical Education, provided for a project to promote awareness of the world of work by preschool children. A contract for producing 16 films was given to Sutherland Learning Associates. A secondary contract was given to the Division of Vocational Education, University of California, Los Angeles to provide basic material for the film writers and to evaluate the effectiveness of the films.

In planning the Career Awareness series for television to be directed to preschool children (3-6 years of age), great emphasis was placed on community involvement. This series of five-minute films was developed to give children some ideas about what people do when they work at their jobs.

There were 16 of these films in the series. Following the introduction film, 15 were devoted to the major career clusters that had been identified by the U.S. Office of Education. They were: agribusiness and natural resources, business and office, construction, consumer and homemaking, communications and media, environment, fine arts and humanities, health, manufacturing, marine sciences, marketing and distributing, personal services, public services, recreation and hospitality, and transportation.

In order to get the contributions from many different points of view, an Advisory Committee was established. The members of this group were teachers in urban and rural schools, child psychiatrists, counselors, pediatricians, guidance workers, vocational educators, and mental health experts. This group was composed of both males and females from a variety of ethnic backgrounds.

As a result of the deliberations of this group, the following guidelines were established to help the children understand themselves and the world of work:

1. Work involves people making things and helping others.
2. People working together are the best problem-solvers.
3. People can help one another and get satisfaction from what must be done.
4. People are interdependent.
5. Some people can do some things better than others.
6. The power to achieve is in all of us.
7. Children work hard at play and do things similar to grownups do.

8. To do important and satisfying things, one must first learn "how."

Using these guidelines and the occupations in each occupational cluster, the media specialists set to work and developed preliminary plans for each of the films.

Again there was community involvement, the preliminary plans were reviewed: by occupational experts for technical accuracy; by kindergarten teachers for the level of understanding; by ethnic groups to review their approach from their point of view; by child psychologists to check for growth and development of the viewers; and from media people to get the children's attention and interest.

Some of the constraints that were dealt with included: the films had to be fast-moving, with bright colors to get attention and interest; the time span required highly selective subject matter; sex stereotyping was avoided; the emphasis would be on education with a positive approach to trying many things; and the fact that many activities that children do during play are similar in nature to the things that people do on their jobs.

The final phase of this project was to find out how effective the films really were. Again the collaborative efforts of many people were involved. The schools, the teachers, the students, and the researchers worked together to get direct reactions from the children. The results of a pre-showing interview and a post-showing interview showed that the films provided the children with knowledge and a desire to learn more about jobs that people do in the world outside of the home, school, and surrounding environment. The children were given a good start in the Career Education process.

A catchy theme song for the film series (written by the Sutherland Learning Associates, developer of the film series) was picked up with relish by the children immediately:

There's so much to do,  
There's so much to be.  
So much could be you,  
So much could be me.  
There's so much in life  
That can satisfy,  
And you'll never know,  
Unless you try.

## Project Cadre

### A Cadre Approach to Career Education Infusion

Project Cadre was designed to start a corps of trainers, termed cadre, capable of inservicing classroom teachers in career education. The project's basic assumption was that the content of a given academic discipline can be presented in a manner which will facilitate the student's ability to see its relationship to the economy, to the world of work, and to their own future occupations. A second assumption was that in order to teach a subject so that students will see these relationships, most teachers will need some new ideas and some special instructional materials.

Phase I of the project pilot tested the feasibility of such a project and suggested content and instructional methods. Phase II involved both the creation of a set of transportable materials and methods for teaching the essentials of career education and the inservice training of 143 educators by means of the methods and materials. Methods and materials were defined, developed, and employed in such a manner as to be replicable and thus transportable.

The method called for teachers to infuse career education into their teaching. Infusion requires special teacher efforts and consequently, special teacher training. There is a great need to define effective methods of infusing career education and to show teachers how to use those new methods. Inservicing teachers for infusing career education into their teaching is a new field of training. Few personnel are available and few teacher education institutions or school districts are capable of providing ongoing, systematic inservice training. Since infusion practices need modification and adaptation to particular classes and since they can be enhanced by community resources, the teacher should be acquainted with the process of formative evaluation and with the available community resources.

The initial instruction using these methods and instructional modules was delivered to a relatively small number of prospective cadre so that the instruction could be carefully monitored and improvements suggested throughout delivery. High priority was given to creating transportable materials and methods, to establishing local teams committed to inservice training, and to enabling the teams to make viable plans for such training.

The set of instructional and organizational procedures were employed at four four-day workshops in training the 143 educators from four large states. These educators comprised 24 school district teams plus observers from eight other school districts and from state departments of education.

For each workshop, participating districts recruited business/community leaders to participate on the panel of the community resource module. The panelists ranged from directors of personnel in large corporations and heads of small businesses such as chemical corporations and machine shops to automotive union vice presidents, veterinarians, car salesmen, the owner of a janitorial service, and members of the Parent-Teacher Association, the Rotary Club, and the Chamber of Commerce. The panelists were invited to comment upon the various learning modules. The interaction between business/industry representatives and school district personnel was seen as the initial step to developing a sense of career awareness on the part of the school district personnel. Although the panels differed at each workshop, all were viewed positively by the participants. As a result of these contacts during the pilot study, teachers made further contacts with business and industry representatives and invited them to classrooms and to join school advisory committees. The positive impact made by these representatives probably played a vital role in the acceptance of the infusion models by the cadre.

Project BITE  
(BUSINESS-INDUSTRY-TRAINING-EDUCATION)

The Effect of Career Awareness and Career Exploration  
Counseling on Vocational Choices of Inner-City  
High School Students

This project was conducted in 1977 and 1978 and involved the development of task analyses and curriculum material for the 15 career clusters identified by the U.S. Office of Education. Instructional modules were developed by the project staff and two teacher-counselors assigned to the project by the Inglewood Unified School District for the study. The management of the project was under the direction of the Los Angeles office of the Division of Vocational Education, University of California.

The wide range of collaborative community relationships developed through the advisory committee efforts is shown by the listing of firms and agencies involved in the committee membership.

- Southern California Edison Company (Business/Office)
- Sears, Roebuck and Company (Marketing/Distribution)
- National Broadcasting Company (Communications/Media)
- Associated General Contractors of California (Construction)
- Rockwell International (Manufacturing)

- American Airlines (Transportation)
- Arrowhead-Puritas Water Company (Agribusiness/Natural Resources)
- Hospital Council of Southern California (Health)
- Walt Disney Productions (Hospitality/Recreation)
- California Air Resource Board (Environmental Control)
- County of Los Angeles, Youth Planning, Department of Community Development (Public Service)
- Los Angeles County Superintendent of Schools Office (Consumer and Homemaking Related)

The objective of the project was to determine whether or not more tenth grade inner-city high school students who participated in a business-industry education counseling and exploration program would make career decisions than a similar group of inner-city students who participated in a regular high school program. The experimental groups of students were exposed to intensified counseling, resource speakers on career opportunities, special instructional materials, and business-industry visitations. The project staff anticipated that, as a result of the program, an alternative high school-community career program might be identified and validated for serving the needs of inner-city high school students who are undecided in career choice. This project will not conclude until March 1978.

Project BITE is an example of the focus placed upon activities directly involved with schools and business and industry. The project was co-sponsored by the Management Council for Merit Employment, Training and Research. The direct involvement of a steering committee from the Management Council and the project advisory committee insured a strong collaborative relationship between the schools and business and industry.

#### Leadership Development Program

During the 1970's some 75 vocational educators from across the nation have participated in a concentrated program of leadership development in the doctoral program offered by the Graduate School of Education, UCLA. This extensive training program has been made possible through an Education Professions Development Act (EPDA) grant awarded by the U.S. Office of Education and because of the efforts of local, state, and national vocational educators and the support of community leaders in the Los Angeles metropolitan area.

The purpose of the program at UCLA is to train vocational educators in the leadership skills necessary to occupy high positions of trust and responsibility and thereby make a longterm impact upon vocational and career education across the nation.

In order to most effectively accomplish this purpose, it was decided that a primary emphasis would be placed on practical experience in the form of internships. The internship was conceived as a way of providing short, intense work-study experiences in a variety of vocational education settings.

Perhaps the major strength of the leadership program at UCLA has been the wide variety of internships undertaken and the opportunity they have provided the awardees to demonstrate their competence in coordination, supervision, and administration of diversified vocational education programs. Internships have come in a multitude of areas; they have extended the leadership program into the community where awardees have benefitted from the experiences gained in a wide variety of learning environments. Awardees have been able to explore and define their personal interests and professional goals as they become acquainted with the responsibilities and duties required at the different levels of leadership. Internships have provided the opportunity to apply theoretical knowledge to practical work experiences. Awardees observe and participate in a vocational education program design, administration, and evaluation. These experiences bring life and realism to the content of their coursework. Interns have been active in policy development and operation in secondary schools, community colleges, state departments of education, the U.S. Office of Education and in research projects at all levels.

Exemplifying the practice of translating academic principles into operating practices, interns have served as a team of knowledgeable and highly motivated individuals who could be called into service at any level of the vocational and career education community. Among the products are community surveys, administrative policy statements, area communication models, educational organization studies, instructional evaluation reports, and national research projects.

At least one intern served on each research project in the Division of Vocational Education, sometimes the entire complement of awardees was assigned to a specific phase of a project--usually all were asked to contribute their talents in one form or another.

Awardees conducted community surveys to determine the types of career choices available and to make program recommendations to the school districts. In Imperial Valley, a survey was conducted to evaluate and recommend improvements in the vocational education programs of all the seven high schools and the one community college and various combinations within the entire area. There were three major thrusts to the research: curriculum, guidance, and

administrative structures. Because this community sits in a fertile area just above the California-Mexico border, it is principally agricultural, bilingual, and bi-cultural. The study was conducted in both English and Spanish. A vast number of interchanges took place among community leaders, businessmen, school district personnel, and the evaluators. It could almost be said that the entire community participated in this survey and in the determining of curriculum offerings and career guidance for their student population.

Other projects put interns into contact with special population groups. One intern worked on a model vocational education teacher training program aimed at involving more minority members in the teaching phase of career and vocational education. One intern worked as a program analyst in the office of the mayor of Los Angeles for the Area Agency on Aging. Some interns investigated the vocational offerings in California's correctional institutions. The question of whether or not the inmates were getting any valid skills training for careers upon their release was addressed. Recommendations were made for a more career-oriented array of classes. Work was done setting up a referral service for career line information for returning Viet Nam veterans. Vast numbers of businesses were contacted and their help solicited in a search for employment opportunities for veterans.

The importance of interacting with the entire community when preparing for leadership positions in vocational and career education cannot be over-emphasized. When studying career opportunities for individuals with special needs, the awardees developed an awareness of the entire scope of career problems encountered by the handicapped themselves as well as the difficulties faced by their teachers, counselors, employers, and family members. These groups were interviewed individually as were clinical social workers, therapists, representatives of rehabilitation hospitals, the Los Angeles County Schools, the Los Angeles City Schools, California Community Colleges, the California Department of Education, the Veteran's Administration, the Foundation for the Junior Blind, the UCLA Neuropsychiatric Institute and their Work Orientation Program, an inter-community home for exceptional students, private schools for physically handicapped students, offices of state and federal legislators, Goodwill Industries, and occupational training centers. Questions were put to those interviewed relating to how people with special needs could best be educated for future employment, what some inhibitors to employment are, what role schools can play, and what societal attitudes most severely inhibit full development of occupational potential. Panels of persons representing the various agencies interviewed were formulated and asked to address the major issues facing handicapped persons and to aid awardees in determining the steps to be taken to alleviate inhibitors to career development in the school setting.

The strength of the leadership development program at UCLA has come in a major part from the collaborative arrangements with business, industry, education, and the community at large.

### Policy Making for Vocational Education

This project, conducted between 1974 and 1976, had as its major goal the increase in the effectiveness of vocational education funds by determining what policies could be effected to improve the quality and increase the quantity of vocational education.

Utilizing the expertise of a 14 member National Advisory Committee, five states (Washington, California, Ohio, Texas, and Georgia), having a representative sampling of vocational education programs, were selected for participation in the project. Six persons in positions involving policy formation were invited from each of the five states to form the project participant group. These participants represented vocational education at all levels; high school, adult school, and community college. From the over 500 years of experience and the broad backgrounds of interest of the participants, it was possible to construct a consensus representing state vocational education policy with implications for local policy needs. The consensus report was presented to the U. S. Office of Education and also disseminated throughout the United States in a series of workshops that were held in each of the 10 USOE regions.

The project report was intended as a guide for all persons; state, county, and local, who mold or contribute to statewide policy for vocational education. Principles of vocational education were restated and updated in order to serve as a basis for the policies reported. Policy statements concerning program, personnel, fiscal operation, and evaluation were included in an attempt to isolate and delineate some of the factors that effect the everyday operation of vocational education at the state level. The statements given in the report were not given as operational policies, or rules and regulations, but rather as general statements that might be used to express the intent of society, business, industry, labor, and the educational hierarchy.

This project was not designed to develop educational leadership and make a general contribution nationally to vocational education rather than to develop collaborative relationships with business and industry.

## Women Entrepreneurs Project

"For Women: How to Start Your Own Business" is the text for a 10-week course recently developed by the UCLA-based Women Entrepreneurs Project. The course and its text were developed under a grant to the Division of Vocational Education, University of California, from the U.S. Office of Education and were designed specifically to meet the needs of adult women interested in the career of business ownership. As a general introduction to the field, the course and the text apply to all types of businesses: retail, service, wholesale, manufacturing, and construction. Assessment of personal suitability to a career in business ownership and preparation for such a career, in terms of individual characteristics and traits, family and financial situation, and business skills, abilities, and knowledge, is as much a focal point of the course as is the "how to" informational content.

The course was structured around the development of a business plan, a written proposal which explains the key aspects of the future business. Students select a business idea early in the course, assess its feasibility, and plan out the marketing, financing, start-up, and day-to-day operations and management of the proposed business. Through this process, they develop the skills and information necessary to put together a business plan.

The text consists of eight one-week units which are called Learning Activities Packages (LAP's). Each LAP focuses on an important aspect of the business plan. Organized in a logical sequence, the LAP's lead cumulatively to the development of a business plan. Each LAP is a self-contained package of materials which includes a statement of rationale, a schedule of class activities (including small group exercises and guest lectures) and homework activities, an optional reading list, fact sheets (reading material for the unit) and homework exercise worksheets. The eight units included in the course are:

1. Small Business Ownership: Introduction
2. Marketing 1: Marketing Research
3. Marketing 2: Marketing Plan
4. Setting Up Your Business: Start-up Decisions and Choices
5. Finance 1: Financial Planning
6. Finance 2: Financing
7. Operations: Running Your Business
8. Putting it All Together: Planning Your Business

This course could be presented as a credit or noncredit community service offering by any educational institution that offers postsecondary programming. Other possible sponsors include: community service organizations, especially those with a commitment to serving women, such as the YWCA and women's centers; government agencies; proprietary business colleges; and consultants in women's career development. The potential market for the course and its text is very large and, as yet, no comparable materials have been developed in response to the demand.

An interest in the career of business ownership is being expressed by growing numbers of women. For most, the idea of becoming the owner of a small business is an exciting but new and unfamiliar idea. The prospect of success, independence, and financial security is attractive; the potential for failure is rarely given serious consideration. In this, women are similar to all aspiring business owners. However, few women own businesses and few women hold top management positions, therefore, women are especially likely to be unacquainted with the demands, the skills, and the day-to-day realities of starting and running a business.

"How to Start Your Own Business" was developed to provide women with an opportunity to explore the field of business ownership over a 10-week period of time in a group of limited size. The course provides a comprehensive introduction to the key aspects of business ownership, while allowing participants an opportunity to apply this information to a specific business idea. Business and industry involvement is integral to the course. The business owners and business experts who visit the class as guest speakers are women who have achieved some measure of success in the business world and who, therefore, are examples of the possibility of achieving success. Interaction among course participants, all aspiring business owners, also provides needed encouragement and support for individuals.

KCET-TV  
CAREER AWARENESS PROJECT

This project, made possible by a grant from the National Institute of Education, consists of the production of 26 one-half hour television programs, and the development of a variety of non-broadcast materials. The project is beamed toward youngsters ages nine to 12 (grades 4-6) to help them to develop resistance to the practice of sex-role and ethnic-role stereotyping.

The rationale as stated by the producer of the TV-CAP program indicates: "Ideally, youngsters exposed to the TV-CAP experiences should ultimately develop a belief and behavior pattern that consistently embraces the position that sex-role stereotyping and ethnic-role stereotyping as it relates to sex roles should play no part in the lives of girls or boys, men or women."

Although the actual program is exciting, comprehensive, and elaborate, the collaborative efforts in achieving the program objectives is a marvel of organization. The project management has tended to maximize collaborative efforts as a means of bringing all of the forces to bear upon the final quality of the production. In order to carry out the conceptual framework of the project, a consortium of organizations was formed as follows:

1. The Los Angeles County School System is creating the project's curriculum.
2. KCET-TV, located in Los Angeles and one of public television's major production centers, is creating the television series which will carry the educational cargo of that curriculum to a nationwide audience when the series is broadcast on the 260 stations of PBS in the fall of 1978.
3. Science Research Associates Inc. of Chicago, is creating publications that will reinforce the educational messages of the television series in both home viewing and classroom viewing situations. Specifically, these publications are called "non-broadcast materials." They include a Parent's Guide, a Teachers' Guide, and Student Guides, the latter being a format similar to that of a comic book.
4. East Los Angeles Community College is designing a community outreach program in which community groups, both social and educational (PTA's, YMCA's, Scouts of America, et al) will be encouraged to use the TV series and the supporting publications, and to act as a sounding board for the entire project.

5. The Annenberg School of Communications at the University of Southern California has the responsibility of conducting the formative evaluation and research efforts that guide the design and development of the TV series and the supporting publications.
6. ISR, the Institute for Social Research at the University of Michigan, will be doing the summative evaluation of the project's achievement of its specific goals.

In addition to the collaborative efforts of the six groups indicated above, there are three major advisory groups: (1) the Management Council, (2) the Core Committee, (3) the Review Board. Supplementing the work of these groups are ad hoc committees formed for special purposes. Every possible outside collaborative effort has been applied to the project with business, industry, and the community-at-large generously represented.

LOS ANGELES PUBLIC SCHOOLS  
CAREER AWARENESS PROGRAM

Youth Motivation Task Force (YMTF)

This program, initiated in 1967 as an activity of the Management Council for Merit Employment, Training and Research in two Los Angeles City high schools, was refocused and expanded during 1970-1977 to reach 33,000 students in 33 different junior high schools.

The Management Council was originally organized in 1961 as the Merit Employers Association of Los Angeles County (MEALAC), an informal group of employer representatives hoping to secure equal employment opportunities in the area. Following the Watts Riots in 1965, the Los Angeles Chamber of Commerce, through its Rehabilitation Committee, combined the efforts of MEALAC and other groups working for equal employment opportunities and affirmative action into the resulting Management Council for Merit Employment, Training and Research.

The Youth Motivation Task Force (YMTF), made up of volunteer employees from business and industry, was a program idea developed by the Management Council. The YMTF volunteers, representing every racial or ethnic group, have all attained responsible positions at their places of employment. These volunteers readily identify with disadvantaged and minority students. They share their experiences and success in the world of work with the students, and urge them to stay in school and receive an education to meet career interests and goals.

In 1977, over 1,600 volunteers representing 79 business and industrial firms participated in the YMTF program. In the informational and testimonial phase of the program, teams of one or two YMTF volunteers visited classrooms and described their jobs and their experiences in a realistic and believable manner. Student class or small group discussions usually followed the presentations. When possible, this phase of the program was followed by an observational phase where students were taken on tours to company offices, plants, and other facilities where they could make firsthand observations of the world of work in action.

The Youth Motivation Task Force program is an excellent example of the collaborative efforts of the business-industry-school community.

#### Career Clubs--Explorer Scouts

The Los Angeles Area Council, Boy Scouts of America, has been very active in organizing and operating Career Clubs with the cooperation of Los Angeles area school districts. Over 18,000 students are enrolled currently in some phase of the Career Club program, yet the BSA area office reports that only about 19 percent of these students are enrolled in Explorer Scouting. The Career Club program is designed to motivate high school age students in the awareness and exploration of careers. Major importance is placed by the Career Clubs on the seminars they schedule featuring presenters from business and industry. These seminars are the high points in the program which also includes other activities.

Career advisors and the persons making presentations at the seminars are drawn from business and industry. During the 1976-1977 two-year period, 12,500 students attended the Career Club seminars. These seminars featured 17 different career presentations involving over 200 men and women from the business and industry segment of the Los Angeles Metropolitan community.

The Career Clubs of the Boy Scouts of America, while not a directly sponsored organizational activity of the schools or the school community, involve the active collaboration of business, industry, and the schools.

### Junior Achievement

This on-going activity is conducted by Junior Achievement (JA), an international organization for high school students, and involves the sponsorship and counseling service of businesses, service organizations, and other interested civic groups.

The 1976-77 Junior Achievement Program in the Los Angeles area was unique in that while 11 such JA companies were organized and operated on business and industrial sites, eight JA companies were operated on school sites of the Los Angeles Unified School District. Over 3,000 students were involved in JA activities during the three year period, 1975-1977.

The use of secondary school shop facilities as "JA Business Centers," the place where JA companies meet and work, is unique in the history of the program. School district cooperation in providing physical facilities not available in the business-industry community made this experience in "small business" possible for high school students who otherwise could not have participated.

### Regional Occupational Program Center

With 139 classes on 105 business and industrial sites and 34 specialized school sites, the Regional Occupational Program Center operates as a high school in the Los Angeles Unified School District with a principal, two deans, 165 credentialed teachers and approximately 300 volunteer teachers from business and industry. Classes are operated in late afternoon hours and on Saturdays on the basis of a total of six hours per week. The length of each program class depends upon the complexity of training needed. During the 1976-77 school year the Regional Occupational Program Center had a cumulative enrollment of 7,000 students.

Classes are offered in the six major career education fields: Environmental and Agricultural Education, Business Education, Health Occupations, Home Economics, Industrial Education, and Public Service Education. Some typical examples: animal care and control, veterinarian assistant, executive secretarial procedures, insurance payroll auditing, retail merchandising, TV production, data processing, occupational nursing, cosmetology, aircraft engine mechanics, auto parts counterperson, motorcycle repair, piping design, offset lithography, machine tool technology, upholstery, warehouseman and fork lift, furniture refinishing, fingerprint classifier, and law enforcement.

The Regional Occupational Program Center serves career education needs of high school students in the district by providing a variety of occupational training classes, most of which cannot economically be offered in each high school, utilizing highly qualified instructors in appropriate community locations and sites with continuing dialogue between school personnel and personnel in business and industry.

The Regional Occupational Program Center could not operate without the cooperation of business and industry. The ROP Center Advisory Committee is made up of representatives of labor and management of area business and industry. The volunteer teachers in the program, working with credentialed teachers, are all employed as skilled craftsmen and technicians and volunteer their expertise and service.

### Policy Statements for Career Education

Several school districts in the Los Angeles metropolitan area have adopted policy statements in the last few years that have affected the local educational climate and structured instructional programs. Typical of such policy statements is the position taken by the Board of Education of the Los Angeles Unified School District on October 28, 1971.

"We believe that it should be the policy of our school district to provide career education for all youth and adults of the district to the end that...

- ...No student drops out of school who is not prepared to enter the world of work
- ...No student graduates who does not have salable skills for productive work or college education
- ...No adult is denied an educational opportunity to become properly employable."

On September 26, 1977 the Board of Education of the Los Angeles Unified School District approved a student integration plan entitled "Integrated Educational Excellence Through Choice" and adopted a resolution which stated:

"Whereas, this plan proposes the establishment of magnet complexes and/or programs for high school level students, and

"Whereas, the business, labor and governmental employers of the greater Los Angeles area have cooperated and supported our District's career preparation efforts through motivation, observation and "hands on" experience, and

"Whereas, a continued partnership with employers of our metropolitan community is essential to the success of these proposed magnet complexes and/or programs,

"Be it resolved, that the renewed policy of this school district, the members of the Board of Education, and the Superintendent and his staff shall be to provide (as a minimum) those skills, knowledges and attitudes necessary to enable each graduate to successfully enter a postsecondary institution for advanced learning and training or to have those performance skills necessary for gainful employment."

The Los Angeles City Schools have carried their policy statements into action plans for the magnet schools to provide an emphasis on excellence through students' choice based on educational and career goals.

An 11-member citizens' group has been established by the Board to serve as a Committee on Schools of Choice and Magnet Schools. The membership will include representatives of potential sponsoring institutions, business, labor, and the performing arts. The choices are the largest at the elementary level which include: Alternative School, Bilingual Multicultural Center, Career Awareness School, Center for Enriched Studies, Conservatory of Fine and Performing Arts, Contemporary Elementary School, Continuous Progress School, Expressive Arts School, Fundamental School, Heritage Center, Individually Guided Education, Intercultural Language School, K-6 Paring, Montessori School, Multicultural Appreciation Center, Open School, Renaissance School, Unified Science Center, Urban Ecology Center.

Choices at the junior high school level include: Alternative School, Bilingual Multicultural Center, Center for Classical European Studies, Center for Enriched Studies, Creative and Performing Arts School, Exploratory Junior High School, Fundamental School, Heritage Center, Humanities Center, Intercultural Language School, Mathematics/Science School, Urban Studies Center.

At the senior high school level the choices include: Alternative School, Center for Airport Careers, Center for Business Finance and Management, Center for Classical European Studies, Center for Creative Arts, Center for Merchandising Careers, Center for Performing Arts, Center for Pre-Architecture, Center for Pre-Engineering, Center for Radio and Television Careers, Center for the Study of Mathematics/Science, Center for Technology in the Construction Mechanical and Industrial Trades, and Comprehensive High School.

## Career Centers and Advisers

Most of the senior high schools in Los Angeles County have established a Career Center in the past five-year period. These Career Centers, featuring career materials and individual instructional media, are the direct responsibility of career counselors or career advisers assigned, for the most part, on a fulltime basis. The career advisers not only work with individual students and small groups of students, but they also contact business and industry representatives located within the school attendance boundaries. The collaborative relationships developed by the career advisers are generally with the small neighborhood store owners and shop operators. The school-community ties developed by the career advisers have increased community understanding of the schools and their programs as well as increased the potential of student work experience slots and student parttime employment along with employment for school graduates.

In the Los Angeles Unified School District alone, Career Centers have been established in 43 of the 49 senior high schools. Career advisers are assigned to each of the 49 high schools and Aides to Career Education (ACE) have been assigned to assist disadvantaged vocational students in the 49 senior high schools, two junior high schools, five special schools, and three opportunity schools.

## Comprehensive Career Education Model (CCEM)

The Los Angeles Unified School District was selected to participate in the development of a Comprehensive Career Education program in late 1971 along with five other school districts in the nation. All of the school districts functioned as subcontractors to the Ohio State University Center for Vocational and Technical Education, the prime contractor to the U.S. Office of Education, for the coordinated development of a school-base model. While curriculum development was a part of the project, the major thrust was designed as a systemized research and engineering effort.

The project identified a curriculum matrix and educational goals appropriate for each unit of the matrix, identified behavioral objectives which logically lead to each desired goal, identified instructional strategies which would be appropriate for each behavioral objective, and established proficiency standards for evaluative purposes.

The project focused on target schools consisting of one senior high school, three junior high schools, and six elementary schools in one geographic area of the school district. Inservice training programs for the personnel in these schools were initiated and implemented. Instructional materials were developed resulting

in 192 different curricular products.

The relationship of the Los Angeles Unified School District to the various segments of the total community and particularly the degree of cooperation with local business and industry were one of the primary factors responsible for awarding of the project. The development of strong school-parent committees and community advisory committees made up of business and industry representatives were positive project results.

### INDUSTRY-EDUCATION COUNCILS

Several years ago the Industry-Education Council of California (IECC) was organized by combining the various Industry-Education Councils of Northern California, Central California, and Southern California. The resulting partnership formed a statewide action-based unit of education, business, industry, management, and labor in sponsoring projects designed to help students to develop career and economic awareness.

In the greater Los Angeles area, the Industry-Education Councils of Long Beach, South Bay, South East, San Gabriel, Santa Anita, Foothill, and San Fernando (Los Angeles City is currently being organized) have been working together as the Industry-Education Alliance of Los Angeles County. With the organization of the Industry-Education Council of California, Los Angeles area activities have been recognized by identifying Los Angeles as an IECC Regional Office with a field consultant. This field consultant gives consultative and technical assistance, disseminates information, coordinates resources, and provides linkage between the local councils and the state organization.

The Industry-Education Council of California has planned a statewide Career Education and Economic Awareness Conference as a project for 1978. Los Angeles area councils will have an active role in this conference in addition to the following local projects:

- Energy Project (Pasadena)
- Career Awareness Project (Compton)
- Magnet Schools Project (Los Angeles)
- National Manpower Institute (Long Beach)
- Career Alert Workshop (Los Angeles County/Orange County)

The councils also maintain open communication with the National Alliance of Businessmen, the Los Angeles Chamber of Commerce, the California Department of Rehabilitation, the California Employment Development Department (L.A. Office), the U.S. Department of Labor (L.A. Office), the Los Angeles County Superintendent of Schools Office, and all branches of the United States Armed Forces.

IEC members, representing both industry and education, exemplify the best in collaborative activities serving career education and economic education.

#### ADVANCED CAREER TRAINING (ACT)

The Advanced Career Training (ACT) program is the result of the cooperative efforts of the Southern California Division of Rockwell International and nine school districts in Los Angeles and Orange Counties.

The Space Division of Rockwell International started this program in 1970 with 90 students from four high schools representing two school districts. This year (1977-78) the program is in 50 high schools; more than 1,000 students are taking advantage of this training opportunity. The B-1 Division of Rockwell International has conducted a similar program.

Every effort has been made by Rockwell to provide the best facilities, environment, and instructional specialists available for participation in the ACT program. Classes have been scheduled after regular working hours so that the students will be provided with "hands-on" training, utilizing the same equipment that is operated by craftsmen and professionals in accomplishing their daily tasks.

The Rockwell classes are held on Tuesday and Thursday from 5:00 to 7:00 p.m. The school districts furnish the students with transportation from the school to the plant and back. The instructors donate their time, talent, and knowledge to help make the program a success. The students are not paid, but do receive school credit for attending these classes. They are selected by schools that will participate in the program utilizing Rockwell personnel for specific counseling.

The courses of instruction that are offered cover a broad range of subjects. The scope of approximately 50 subjects include: Calibration, Commercial Art, Data Processing, Electronics, Industrial Mechanics, Security, Key punch, Machine Shop, Model-Making, Nondestructive Testing, Publication Typing, Technical Illustration, Tool Design, Welding, and Writing and Editing.

Since the beginning of the ACT program more than 5,000 students have participated. The positive aspect of the ACT program is that everyone concerned benefits. Upon graduation from high school the students are better prepared to follow their chosen career, either through gainful employment in industry or through continued education at the college level. The school district can increase its curricula, expose students to a "real world" environment, provide instructors with unique qualifications, and gain use of modern facilities and equipment for the students. Industry benefits by gaining a pool of trained potential employees, strengthening the community relations programs, exceeding the demands of a constructive affirmative action program. The instructors' efforts are noted in merit reviews; they also receive a course in teacher training that qualifies them for a parttime vocational teaching credential.

In addition to providing job opportunities with Rockwell and other major industrial concerns, a scholarship program for outstanding ACT graduates is offered. This annual program provides 10 four-year \$3,200 college scholarships.

This collaborative effort between industry and education is a dynamically effective method of enhancing the educational program and building a stronger community.

#### CALIFORNIA OCCUPATIONAL INFORMATION SYSTEM

The need for information regarding future manpower needs of industry has long been an important factor in planning. This need has been recognized in federal and state legislation and the results are beginning to become apparent.

One of the direct results is a report entitled Manpower for 1975-80 for Los Angeles County. The data contained within this report were the result of collaborative efforts of many people. The leadership has been taken by the California State Department of Education, Vocational Education Section, in cooperation with the State of California Employment Development Department, Southern California Employment Data and Research.

At the state level, the advisory group is made up of five representatives each from secondary education, community colleges, and the Employment Development Department. This group works with the U.S. Department of Labor, Bureau of Labor Statistics. A program has been developed that is known as the Occupational Employment Statistical Program. Each year about 200 or more industries are surveyed for the employment figures. This is done on a three-year cycle so that over 600 industries provide the up-to-date information.

In order to provide for duplication or omissions, a Coordinating Council has been formed that is made up of representatives from the California State Department of Education (secondary), the Board of Governors of the California Community Colleges, the California Employment Development Department, the California Comprehensive Employment and Training Administration, and the California Rehabilitation Division.

The material that results from these efforts provides information for about 470 occupational categories. This information is detailed into trends, job opportunities, and other significant elements. The utilization of these data can be of material assistance to the planning process for vocational education.

### HIGH SCHOOL INVOLVEMENT PROGRAM (HIP)

At the Aircraft Division of the Northrop Corporation in Hawthorne and Palmdale, California, a collaborative program (HIP) is designed to supplement the classroom and work experience of high school students. The program started in 1970 with 19 high schools in five school districts.

Early in the year a combined meeting of Career Education Counselors and Northrop personnel are oriented to the program. The teachers then begin the selection of the students from their high schools. Students selected must be:

1. Graduating in June at a participating high school
2. Interested in becoming a participant
3. Desirous of learning a marketable skill
4. Regular in their school attendance
5. Knowledgeable in a related subject matter

At the same time the students are being selected in the schools, Northrop employees are being recruited as voluntary instructors and counselors. The final selection of students results from a combined interview involving counselors from both the schools and Northrop. By December the final selections are known.

During January the schedules are arranged and work assignments made to both the students and the Northrop volunteer instructors. The schedule is established for a one-to-one basis.

The active program at the plant starts about February 1, and concludes about June 1, making 16 weeks of training sessions. The transportation of the students from the school to the plant and back is furnished by the school district. The training sessions run five days per week from 1:30 to 3:30 p.m.

The students are treated as employees, each wearing a badge that indicates their status in the HIP training program. All of the instruction is "hands on" and done on a one-to-one basis by Northrop craftsmen and professionals with the aid of the most modern equipment, supplies, and procedures the industry has to offer. The training is spread to more than 50 major departments including every unclassified area of operation. Some examples of the opportunities for training in the departments are: Finance, Engineering, Data Processing, Plant Protection and Security, Electronics, Industrial Relations, Graphics, Facilities, Operations Control, Product Support, Contracts and Pricing, Quality Assurance, Procurement, Standard Tooling, Mail Services, and Manufacturing. In addition to the regular training, students are required to attend two sessions of a Job Development Workshop. Each two-hour session of this workshop is conducted by a representative of the Northrop Employment Department. The sessions include interviewing techniques, completion of job applications, purpose and design of a resume, and video taping of student interviews.

The students are not paid a wage but do receive two hours of high school credit. The volunteer Northrop instructors take on the training responsibility in addition to their regular jobs.

At the completion of the program the Northrop organization provides a fine graduation ceremony that is attended by the students and their parents, the volunteer Northrop instructors and their spouses, the school district administrators, and the management of the Northrop Corporation.

Over 1,000 students have been trained in the HIP project over a seven year period. This program, aimed at bridging the gap between school and the world of work, has had many interesting results.

Although most of the students were not college-bound when they entered the HIP project, 45 percent of them have gone on to post-secondary schools after graduation from HIP. Jobs related to skills learned at Northrop were pursued by 39 percent of the students. Summer employment by Northrop was provided for 23 percent of HIP graduates. Sixteen percent of the HIP graduates have been hired as permanent Northrop employees.

Since the beginning of the program, seven years ago, 93 percent of HIP graduates are either working or continuing their education--a contrast that to the high national teenage unemployment rate.

There are four major factors in HIP contributing to its success:

1. A large industrial organization, with 11,000 employees, has created an atmosphere of learning and leadership for many students who otherwise might not find such an opportunity.
2. Four school districts are enthusiastic in their support of this approach to education.
3. Northrop employees have willingly devoted their talent, time, and energy to young people.
4. Many high school students have begun to recognize the value of this kind of experience.

The accomplishments of HIP have been recognized by awards that have been made to Northrop Corporation by the American Vocational Association, the South Bay Industry-Education Council, the Los Angeles City Unified Schools, the City of Lawndale, and the Los Angeles City Council.

The real reward for this program comes from the fact that everybody benefits from it. The student, parents, instructors, industry, the community, and the nation are all recipients of these benefits.

HUMAN SERVICES CENTER  
COLLEGE OF CONTINUING EDUCATION  
UNIVERSITY OF SOUTHERN CALIFORNIA

The Human Services Center of the Extension and Conferences Division was established in 1976 to (1) develop new ways of applying interdisciplinary knowledge and technology to the resolution of human service problems, and (2) to look at the range of humanistic needs and concerns in order to promote citizen self-determination by helping people to become better able to manage their own lives, plan their own futures, and solve their own problems.

The Center lists five basic functions:

1. To develop and test new models of preventive and rehabilitative continuing education and training for those in the field of human service systems

2. To provide technical assistance and applied research to human service organizations in problems relating to program design, service delivery, policy formulation, management coordination, and program evaluation
3. To establish a Materials Resource Center of publications, legislation, curricula, and educational models for educators, trainers, and practitioners in the human services field
4. To sponsor conferences which promote resource linkages across a wide range of human service disciplines and agencies
5. To provide relevant findings for application to problems encountered by human service administrators, policymakers, program planners, and other human service practitioners.

The Human Services Center of the University of Southern California has received a one-year Federal Office of Career Education grant which will implement a model for the communication of career education and human services philosophy, methods, program activities, and evaluation results to career education practitioners and to the general public. The project, entitled "Implementing Career Education Communication Through Community Teams," proposes activities that are expected to increase the quality and the quantity of career education through collaborative community efforts, and is intended to have national impact.

The preponderance of state and local career education activities in the U.S. currently emanates from schools. It is the intention of the project to direct its efforts toward community-based communication models; representation from schools will be sought for membership on the community teams.

The composition of each community team selected for participation must represent at least six different community systems, such as:

1. Human Services agencies and/or organizations
2. Employers, trade union leaders, and/or other parties representing business and labor
3. Media, especially public service media
4. Educators and public librarians
5. Parents and organizations with particular concern for the home and family

6. CETA prime sponsors
7. Public agencies, local government, and elected officials

Although specific representation from non-work related ethnic and minority organizations is not sought, it is anticipated that the persons and/or organizations working with the project will represent fairly and amply the views of ethnic minorities and women regarding career education and the world of work.

Four community based teams from four representative communities in the western United States will be selected and will participate in a process that is based on the Office of Career Education mini-conference model. The four community teams will meet together to learn and put into practice the process of collaboration and to study and develop, collaboratively, recommendations for resolution of career education issues. The sites selected for participation include Albuquerque, New Mexico; Phoenix, Arizona; Las Vegas, Nevada; and Los Angeles, California.

Ten community team members from each of the four sites will meet in Los Angeles in January, 1978, to participate in a collaborative process to address issues and concerns related to their communities, the philosophy and practices of career education, and the concepts of human services.

In February 1978, each community team will conduct a mini-conference in its home city with the assistance of the project staff and consultants. The teams will meet to develop a Career Education Communication Plan for their respective cities which will be based on the information and recommendations resulting from the first mini-conference in Los Angeles.

The community teams will begin implementation of their plans after the February conference; the project staff and consultants will be available to the community teams for on-site assistance and consultation throughout the project year.

A third mini-conference is scheduled for June 1978, again in each team's home city, and will provide an opportunity for the community teams to evaluate the initial phase of the implementation for the purpose of revising and improving its effectiveness.

Each community team effort will be reported and evaluated by the team itself, and the entire process will be evaluated at each stage by the project evaluation team. The findings and final report of the community teams and the evaluation staff will be prepared for national distribution by the Office of Career Education.

## MASTER PLAN

The Los Angeles area is extremely complex from the standpoint of a variety of populations. Los Angeles has been referred to as the city 200 miles long--Santa Barbara to San Diego--and it is difficult to make logical decisions about the exact limits of the metropolitan area. Los Angeles County, which is very large, is therefore somewhat of an arbitrary geographical location for defining a metropolitan area.

Los Angeles County contains 95 school districts--33 elementary districts; 7 high school districts; 42 unified districts; and 13 community college districts. Within these districts are 1,769 schools--1,203 elementary schools; 208 junior high schools; 168 senior high schools; 21 community colleges; 89 continuation schools; and 80 adult schools. Over one million students attend the schools and the county contains more than 5,000 employers.

It is obvious that within this massive industry and education area coordination of industry efforts and education efforts are imperative. Career education in this area cannot survive without coordination of activities. The very thought of 1,203 elementary schools working independently attempting to get assistance in career education from business and industry suggests a high level of confusion. This level of confusion must be avoided and can only be avoided by a master plan of cooperative effort of the community forces and the educational forces.

Career education theory suggests that all students must be involved in career education plans and that the plans involve all occupations. Utilizing the resources of business and industry can add reality to career choice, but the educational value of contacts with business and industry varies considerably. A vast difference exists in the potential value of a field trip as opposed to actual work experience; and this is further complicated by the fact that the needs of students are different. Part of the problem is a basic one which has not been extensively studied. In general, it is necessary to know what kinds of services are possible from industry. There is little evidence to indicate that this potential has been probed to any degree of thoroughness. Once the possibilities of industry to contribute to the development of career education are thoroughly known it must then be determined what kinds of services industry is willing to provide. It is quite possible that some kinds of services that business and industry could provide may suffer constrictions rooted in such things as safety and company policy. It seems reasonable that differences will occur between the actual potential of business and industry and the actual extent of ability to provide services to career education.

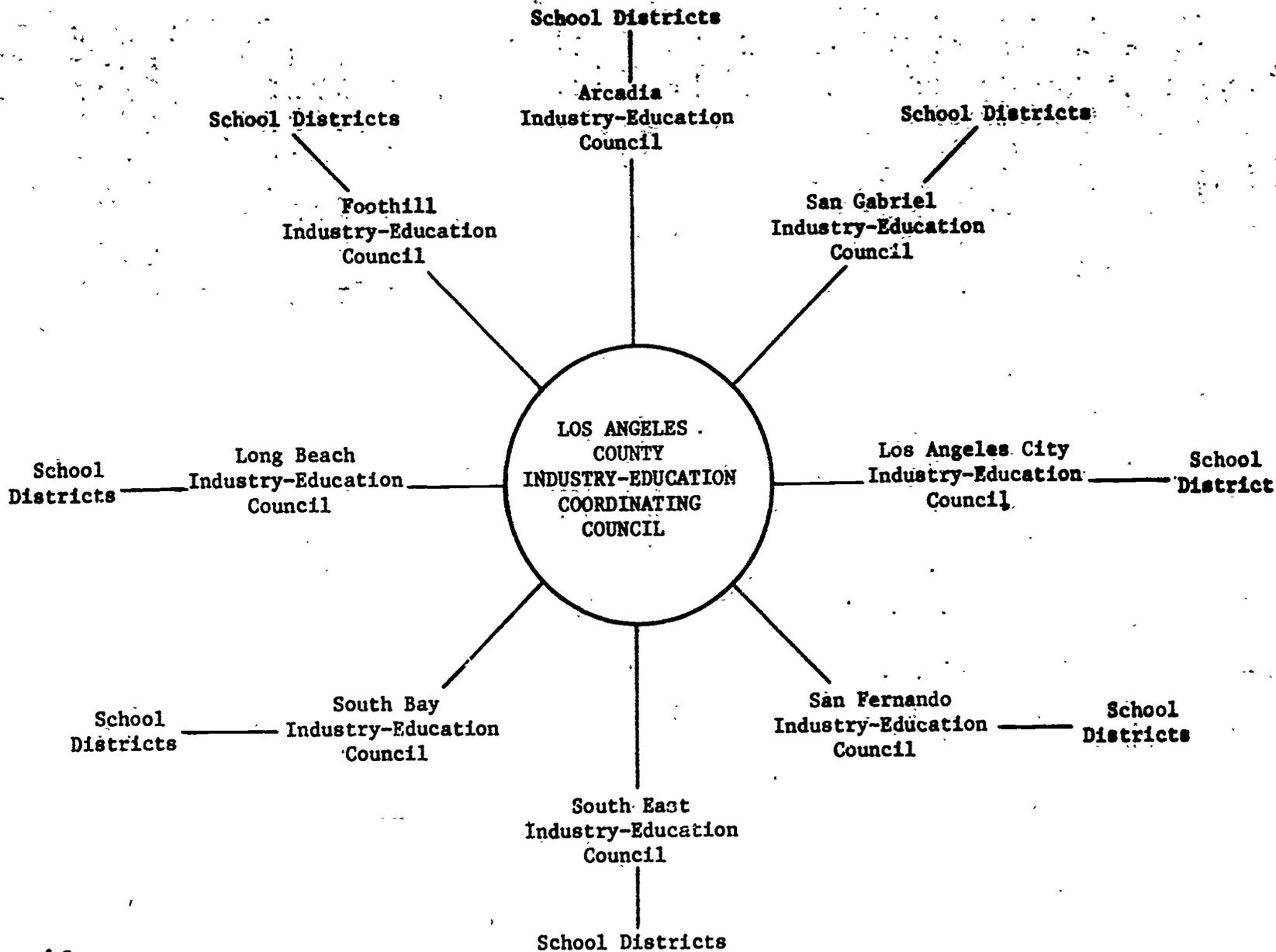
Finally, in order to assure that the best kinds of career education services from business and industry are utilized, the kinds of services that have significant educational value must be determined. In short, it is imperative that the career education goals be reached by the most direct route.

A master plan to maximize the effectiveness of career education in Los Angeles County must include provisions to reach all of the schools in the county and must provide an organized industry group to prevent duplication of effort both from the standpoint of the schools and industry. The following plan is based, in part, upon an existing structure of industry-education councils in California and a hypothetical plan which will encompass all of the schools of the county. It must be said that the present efforts of the industry-education council in the Los Angeles area have been tremendously successful. A high degree of interest has been generated by the industry-education councils and the industry representatives have been exceedingly helpful in organizing career education efforts in the area. It would be difficult to find more dedicated groups of people than those represented by the industry-education councils in California.

The master plan for Los Angeles County (See Fig. 1) suggests that a Los Angeles County Industry-Education Coordinating Council be developed for the coordination of all industry-education efforts in the interests of career education. The Coordinating Council would have eight satellite, or field, councils. Each of the field councils would serve several school districts. The organization would be developed so that all of the 95 school districts were related to one of the industry-education field councils. Career education efforts in any one school district, related to industry cooperation, would become the responsibility of the local or field industry-education council concerned.

The purpose of the Master Plan is to maximize the efforts of industry-education councils to the end that all of the potential resources in the business-industry areas are included in the career education plan, and in order to prevent duplication of effort. This would require that the Los Angeles County Industry-Education Coordinating Council have in its membership representatives of the field industry-education councils. Each field council would be responsible for coordination activities for the school districts it represents and to include in the business-industry complex of a particular field council all of the employment areas represented by the area served by the field council.

The field councils are extremely important because these councils are the first, and probably final, contact that the schools have with business and industry. Field councils would need to be thoroughly informed about the career education activities, and personnel in each of the school districts. Frequent meetings of



field councils and school districts are imperative in order for the system to work properly. Industry-education councils in California have taken the position of catalysts that will smooth out the pathway from the school into appropriate experiences in business and industry. These experiences fall into many categories in the general areas of career awareness, career exploration, and career preparation (vocational education). The schools must feel that they have a central source of information--the field council--to which they can relate their needs in order to implement more effectively the career education activities of the school; and the field councils must feel that they are contributing, by providing opportunities for students to engage in career education activities in business and industry, a service that is vital to the success of career education objectives. The key point here, basic to all of the career education activities, is that through such relationships with business and industry the students will, in fact, find an appropriate career role for themselves as a purposeful activity instead of merely "settling for" a job.

The county industry-education council must be partially composed of representatives from all of the field councils in order that adequate coordination can take place. As an example, suppose that the Foothill Industry-Education Council finds a need for student experiences that are not available in its field area. The Foothill Council could make this known to the County Council who would find an appropriate opportunity to satisfy this need in one of the other field councils.

Three problems arising in the Master Plan, which are not resolved by the plan, are (1) staffing of field councils and the county council; (2) housing and financial support of the councils; and (3) evaluation of the effectiveness of the industry education activities.

## RECOMMENDATIONS AND GENERALIZATIONS

### Recommendations

#### 1. Organize a Local or Field Industry-Education Council.

Local industry-education councils can work with local situations and also work through the area coordinating council for the solution of mutual problems that extend beyond their boundaries. Local councils must be organized as satellite or field offices of the central coordinating council. The local council is in a better position to reflect for the schools the opportunities of the local area. Communities with specialized needs will use the same basic principles, but adapt them to local conditions. Isolated communities with limited business and industry opportunities will need assistance from state industry-education councils. Although the principles of collaboration are about the same, such communities will need assistance in adapting their resources to the educational problem.

#### 2. Organize a Central Area Coordinating Industry-Education Council.

Membership of this council should be made up of the president or representative of each of the local or field councils to provide for liaison and communication. This council should be representative of all of the major employment fields in the metropolitan area concerned--agriculture, business, industry, health, transportation, and the like. It should consist of active and retired business and industry executives and key top-level educators--people who represent, or have access to, the policymaking structure of industry and education.

The interdependence of industry and education is obvious. Industry uses the product of the schools and economic existence depends upon the development of competent, effective, human beings. The key to success of an industry-education council depends upon communication and cooperation, a two-way process. The Central Area Industry-Education Council can provide a coordinated effort in career education. A strong central council can organize the resources of business and industry to provide maximum benefit to the purposes of career education, and they can provide that all-important goal of reducing duplication. Too frequently schools and selected employer groups have moved out independently to assist the development of career education and face the chance of duplication and waste of effort.

### 3. Affiliate with State and National Councils.

Some states have statewide industry-education councils for the purpose of developing increased coordination of effort to provide maximum assistance to schools. Efforts are underway by the Industry-Education Councils of America (San Francisco) to encourage the organization of industry-education councils in all of the states. This effort has been sparked by the encouraging development and activities of the industry-education councils in California and Arizona. The Industry-Education Councils of America states objectives for local and state councils as follows:

- To foster the principles of our American profit-motivated free enterprise system.
- To increase awareness among students of the rewarding career opportunities available in business and industry.
- To intensify interest among business and industry leaders in encouraging students to prepare for careers in business and industry.
- To increase appreciation and understanding among parents of the advantages to students in preparing for careers in business and industry.
- To expand knowledge of educators of the career opportunities available in business and industry and the qualifications necessary for such careers.
- To make the resources and facilities of business and industry available to educators.
- To maintain a closer and continuing relationship between educational and business-industry communities in the areas of mutual interest.

Coordination efforts in California have resulted in plans for the first annual statewide CAREER EDUCATION and ECONOMIC AWARENESS CONFERENCE to be held in San Diego, January 27-29, 1978. The conference will feature teacher workshops, industry-labor seminars, question and answer sessions, general sessions, and more than 90 "How to" clinics. It is a joint venture planned by the Industry-Education Council of California and the California State Department of Education and co-sponsored by 31 industrial, educational, professional, state, county, and district school organizations and agencies.

These goals capitalize upon the two essential ingredients of

communication and cooperation. The Industry-Education Councils of America have rated coordinated effort as an item of prime importance.

Among its purposes, the Industry-Education Councils of America have stressed coordination on a national scale. The goals of such national coordination have been stated as follows:

- Establishment of a clearinghouse to foster better understanding of the inter-relationship of education and industry.
- Formation of state or regional groups who would develop and coordinate programs at the local level.
- Development of an interchange of information concerning existing programs and methods for their implementation at state and regional levels.
- Sponsorship of regional meetings and seminars designed to stimulate maximum exchange of information.
- Long-range planning necessary to carry out these objectives.

#### 4. Establish Responsibility for the Coordination of School Based Career Education.

It is equally as important to organize and coordinate school efforts in career education as it is to coordinate the activities of business and industry in the interests of career education. In Los Angeles County, an administrative unit in the Office of the County Superintendent of Schools has been organized to provide many kinds of services to encourage the participation of schools in career education activities. Several local school districts have organized similar service units.

Every school should designate someone as a career education representative. Every school district should have a person designated as a coordinator of activities in career education. A large area unit, such as a county, should be designated as a coordinating unit for the total educational area.

It is not the responsibility of an industry-education council to coordinate the school activities in the area of career education, but industry-education councils should be interested in serving as catalysts to draw attention to career education.

## Generalizations

1. The Collaborative Effort Between Education and Industry Should Extend to Counseling, Advising, Instructing, and Evaluating.

Again, it is necessary to capitalize upon the partnership idea in a collaborative venture. The reality of the occupational world must be joined appropriately with the theory and practice of education in order to gain the maximum benefit of the collaborative effort.

2. In Every Community There Are a Number of Highly Qualified Craftsmen and Professionals Who Can Serve as Resource People.

The schools have been slow to utilize this group of resource people in programs of career education. Many of the potential helpers are employed and desire to be of assistance after their working hours, others are retired and have great flexibility of available time. Some system of locating such resource people should be developed by local schools as a means of easing and implementing the instructional and cooperative industry efforts in career education.

3. Any One Industrial Organization Can Only Work With a Limited Number of Schools and Students.

The Los Angeles County experience indicates that when any program attempts to take too large a bite of the task the project will suffer. The planning phase of such projects is exceedingly important to ensure that the school and the industrial organization are in total agreement in determining the size of a particular project to avoid its exceeding the limits of the industry concerned. This collaborative aspect is generally company gratuity which must avoid interference with the regular work of the company.

4. Any Industrial Organization Will Need to Determine What They Are Prepared to Offer in the Way of Facilities, Equipment, Time, and Personnel.

This part of the planning process must not only have the approval of top management, but all of the administrative and supervisory line personnel as well. The industrial organization must develop an enthusiastic posture about the collaborative program based upon careful analysis of all factors to be involved from the company standpoint, including the future needs of both the employee and the company.

5. The Funding of Staff and Support for an Industry-Education Council Could be Provided by Business, Industry, Foundations, and Other Appropriate Sources.

To be effective every industry-education council will require financial assistance in carrying out the objectives of its organization. This assistance is necessary in order to provide operational expenses such as consultant and technical services, clerical support, office supplies, and physical facilities.

6. Advisory Committees Must be Organized to Represent Specialized Career Education Interest in a Geographic Area Rather Than a Local Area in Order to Effectively Utilize the Advice and Counsel of Highly Qualified Business and Industry Personnel and Prevent Duplication of Requests for Their Services.

Those business and industry representatives who are recognized as having expertise and an interest in career education have expressed concern over their inability to accept the many similar requests for their services on local advisory committees.

The organization of advisory committees serving secondary and postsecondary career education in a geographic area effectively utilizes the advice and counsel of these business-industry leaders and minimizes the duplication of requests for their time.

7. The School District Needs to Survey its Total Industrial Community to Determine the Potential Training Opportunities and the Potential Placement of Successful Graduates.

It is obvious that the school district must have a thoroughly qualified career education coordinator who is well informed about the California Occupational Information System and is a working partner with the field and central coordinating industry-education council. The school must enter into proposals of a collaborative nature as an interdependent agent and not attempt to work out such projects independent of the total structure of training and placement sites.

8. An Articulated Curriculum that Provides for the Involvement of Instructional Activities in the Classroom, the School Shop, and the Business-Industrial Training Facility Provides the Most Effective Educational Background for the Students.

The utilization of business-industry facilities and equipment provides students with realistic experience in the world of work.

9. The Industry Based Instructors in Vocational Programs Represent an Experienced Group of Specialists that the School Districts Can Utilize as Needed.

Craftsmen, technicians, and professionals that have been teaching in business and industry have unique skills, knowledge, and expertise that can be utilized in career education.

10. A Program of Career Adviser Assignments for Students During Their Senior Year Should be Developed by Each High School.

During the senior year, each student should spend at least two days per month with an adult representative of the career she/he has chosen. The student would talk with the career adviser, visit the work location of the adviser, learn about the lore, background, history, working conditions, and other factors affecting the occupational area. The students would meet other people in the field, attend craft or professional association meetings, and develop a general rapport with the occupational area of their choice.